Lower Passaic River Study Area



DISCHARGE PRP CASES FOR THE LOWER PASSAIC RIVER STUDY AREA

PRP EXTRACTION FORM AND EVIDENCE CONCERNING:

SANDVIK COROMANT COMPANY

PREPARED FOR:

LOWER PASSAIC RIVER STUDY AREA COOPERATING PARTIES GROUP

SUBMITTED TO: USEPA REGION II

LOWER PASSAIC RIVER STUDY AREA

DISCHARGE PRP CASES FOR THE LOWER PASSAIC RIVER STUDY AREA

SANDVIK COROMANT COMPANY

INDEX OF EVIDENCE

| Tab No. | Year | Day and Month | Description |
|------------|-------------------|------------------|--|
| 1 | 2007 | 2-Feb | Letter from Sandvik re: Terminated Sewage Permit# 08220005-incomplete - with attched PVSC Sewer Use Permit |
| 2 | 2007 | | Sandvik Coromant Company information and related industry information from Hoover's |
| 3 | 2007 | 10-Sep | Information retreived from www.sandvik.com - Organizational information and corporate structure |
| 4 | 2007 | 28-Aug | Dun & Bradstreet - Business Information Report on Sandvik Inc. |
| 5 | 1980 | April | Excerpts from PVSC Heavy Metals Source Determination Study |
| 6 | 2005 | 19-Sep | PVSC Application for a Sewer Use Permit |
| 7 | 2001 | 26-Jan | Application for a Sewer Use Permit with Sewer Flow Diagram, Application Fee & Check with Sewer Use Permit #08401682 (expires 2001). Letter re: Change in personnel |
| 8 | 1963, 1975 | | State of New Jersey, Corporate Filings |
| 9 | 2006 | | Sandvik - Annual Report 2006 |
| 10 | 2007 | 12-Sep | Conversion of Swedish Kronor to US Dollars |
| 11 | 2004 | 11-May | PVSC Industrial User Inspection Report with Chemical inventory & Non-Hazardous Waste Manifest |
| 12 | 2000 | 19-May | PVSC Industrial User Inspection Report with Chemical inventory, Sewer Flow Diagram & Sandvik Air Stack Permits |
| 13 | | | Sandvik Coromant - Site Sanitary Sewer Flow Diagram |
| 14 | 1956-57, 1968, | | Excerpts from New Jersey State Industrial Directory - 1956-1967, 1968, 1973 |
| | 1973 | | editions |
| 15 | 2002 | | NJDEP Community Right to Know Survey |
| 16 | 1978 | | Administrative Consent Order - incomplete - with attached Sewer Flow Diagram |
| 17 | 1997 | 30-Apr | PVSC letter re: Process Discharge Request |
| 18 | 2001 | | Sewer Use Permit #08220005(expires 2006) with attached SIU Fact Sheet |
| 19 | 2000 | 19-Jul | PVSC letter re: Revisions to Sewer Use Permit - with attached excerpts from PVSC Sewer Use Permit |
| 20 | 1972 | | Excerpts from PVSC Annual Report - 1972 |

| Tab No. | Year | Day and Month | Description |
|------------|------|------------------|--|
| 21 | 1975 | | Excerpts from PVSC Annual Report - 1975 |
| 22 | 1975 | | National Pollutant Discharge Elimination System Permit to Discharge |
| 23 | 1976 | | Excerpts from PVSC Annual Report - 1976 |
| 24 | 1976 | | Excerpts from Overflow Analysis - Yantacaw Street, Clifton |
| 25 | 1994 | 6-Jan | Affidavit of Seymour A. Lubetkin |
| 26 | 1999 | 28-Jul | PVSC letter re: Notice of Violation |
| 27 | 2002 | 11-Apr | Memo re: Exceeded threshold limit for Cu with lab results . |
| 28 | 2003 | 30-Sep | PVSC letter re: Notice of Violation |
| 29 | 2006 | 7-Dec | EPA Region 2 - Letter Re: NPL Listing History and Fair Lawn Well Field |
| 30 | 1978 | 15-Aug | Excerpts from PVSC Heavy Metals Source Determination Study |
| 31 | 2007 | 3-Oct | Information re: Tools with treated surfaces from www.freepatentsonline.com |
| 32 | 1995 | 8-Sep | Excerpts from PVSC Pretreatment Annual Report Number 12 |
| 33 | 1996 | 10-Sep | Excerpts from PVSC Pretreatment Annual Report Number 13 |
| 34 | 1998 | 9-Sep | Excerpts from PVSC Pretreatment Annual Report Number 15 |
| 35 | 2003 | 29-Aug | Excerpts from PVSC Pretreatment Annual Report Number 20 |

LOWER PASSAIC RIVER STUDY AREA PRP DATA EXTRACTION FORM

SANDVIK COROMANT COMPANY

CURRENT MAILING ADDRESS/CONTACT INFO:

John Israelsson, President & Chief Executive Officer
Sandvik Coromant Company
1702 Nevins Road
P.O. Box 428
Fair Lawn, NJ 07410
(SAN000008 at Tab 1, SAN000252 at Tab 2, and SAN000242 at Tab 3)

FACILITY ADDRESS:

Sandvik Coromant Company 1702 Nevins Road Fair Lawn, NJ 07410 (the "Site") (SAN000008 at Tab 1, SAN000252 at Tab 2)

Sandvik Inc. 1702 Nevins Road Fair Lawn, NJ 07410 (SAN000209 at Tab 4)

Sandvik Steel Inc. 1702 Nevins Road Fair Lawn, NJ 07410 (KLL013832 at Tab 5)

The Site has been identified as Block 4902 and Lot 2. (SAN000031 at Tab 6, SAN000087 at Tab 7)

FINANCIAL VIABILITY (annual revenue, # of employees):

The company was reported to have commenced operations at the Site as of 1955. The company, under the name of Sandvik Steel, Inc., was reportedly incorporated in Delaware on February 20, 1963 and registered to do business in New Jersey in March of 1963. In May of 1975, the corporation officially changed its name to Sandvik, Inc. (SAN000122 at Tab 11, SAN000153 at Tab 12, SAN000229-236 at Tab 8)

Sandvik, Inc. is currently doing business as "Sandvik & Coromant" or "Sandvik Coromant Company" (all collectively hereafter "Sandvik"). (SAN000252-254 at Tab 2) Its ultimate parent is the Swiss company, Sandvik AB. (SAN000211 at Tab 4) Sandvik, Inc. reports having a workforce of 4,000 employees. There are 250 employees reportedly based at the Fair Lawn Site. Sandvik Coromant's 2007 estimated sales were \$8.9 billion. (SAN000209-210 at Tab 4, SAN000252 at Tab 2, SAN000258 at Tab 9)

Sandvik AB's 2006 Annual Report indicates a net profit for that year of \$1,216.13 M. The same report indicates that the Sandvik Tooling business area, which includes Sandvik Coromant, reported operating profit of \$778.25 M. (SAN000239 at Tab 3, SAN000256 at Tab 9, SAN000259 at Tab 10, and SAN000261-63 at Tab 10)

DATES OF OPERATION (include info. on predecessors/successors if known):

Sandvik Coromant Company commenced operation at this facility in 1955 (SAN000122 at Tab 11, SAN000153 at Tab 12). Sandvik is presently in operation, as per the company's website found at: www.coromant.sandvik.com

DESCRIPTION OF FACILITY OPERATIONS (list CERCLA hazardous substances used, manufactured or present):

The Sandvik Site is located at 1702 Nevins Road, Fairlawn, Bergen County, New Jersey. The Site is bordered to the south by Henderson Brook, to the west by McBride Avenue, to the east by industrial buildings, and to the north by Nevins Road. (Google Earth, SAN000148 at Tab 13) The Site is part of the Fair Lawn Industrial Park. (SAN000264 at Tab 29)

Provided below is an annotated aerial photograph identifying the approximate location of the Site:



Sandvik Coromant Company 1702 Nevins Road Fairlawn, NJ 07410

Aerial Photo Copyright 2007 Photo Source: Google Earth (Europa Technologies/Navteq/State of New Jersey)

Site boundary line locations as shown are approximations

(SAN000148 at Tab 13)

At the Site, Sandvik manufactures carbide cutting tools, machine tools such as lathes, and tungsten carbide inserts. The principal products produced at the Site are tools, saws, machinery, iron products, cemented carbide inserts, and various metal working products. The manufacturing

process employed at the Site involves pressing, grinding, sintering, honing, and coating of inserts. Additional processes occurring at the facility are reported to be "CVD chemical vapor coating (deprivation)." Chemical vapor deprivation is described as a method in which a hard material layer is deposited on the surface of a high performance tool to increase wear resistance. This hard material coating often consists of carbides. The principal raw materials used in the carbide powder mixtures coating operation are carbide powder, titanium tetrachloride, hydrochloric acid, hydrogen sulfide, nitrogen, carbon dioxide, aluminum pellets, carbon monoxide, methane, tungsten carbide 95-98%, and cobalt 2-5% (SAN000033 at Tab 6, SAN000089 at Tab 7, SAR000123 at Tab 11, SAN000222 at Tab 8, and SAN000299 at Tab 31).

According to the 1956-57 New Jersey Industrial Directory, Sandvik manufactured steel springs. (SAN000198 at Tab 14) As of the 1968 and 1973 editions respectively, Sandvik's products are described as:

1968: "Tempered spring steel, tungsten carbide tools, inserts and blanks, clock type power springs, saws, chisels and other hand tools." (SAN000200 at Tab 14)

1973: "Strip steel, stainless tube & pipe, stainless wire, carbide cutting tools, carbide wear parts, die steel." (SAN000202 at Tab 14)

As of 2005, the following hazardous substances are known/suspected to be present on site:

- 1,1,1 Trichlorethane
- Methylene chloride (dichloromethane)
- Trichlorofluoromethane
- Dimethylphthalate
- Toluene
- Asbestos (fibrous)
- Cadmium
- Chromium
- Copper
- Cyanide
- Lead
- Mercury
- Nickel
- Formaldehyde
- Vanadium
- Xylene
- Zirconium
- Acetonitrile (methyl cyanide)

(SAN000040-44 at Tab 6, SAR000096-100 at Tab 7, and SAN000182 at Tab 17)

The facility operations have two process wastewater outlets that are connected to the combined sewer system. The average daily flow from outlet 1 is approximately 47,000 gallons and from

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outlet 2, approximately 5,000 gallons per day ("GPD"). (SAN000035 at Tab 6, and SAN000063 at Tab 16) As of 2001, Sandvik reports that approximately 64,000 GPD of wastewater are discharged from the facility. (SAN000033-34 at Tab 6, and SAN000128 at Tab 11)

Water treatment at the Site involves water softening and carbon bed filters. (SAN000124 at Tab 11)

Sandvik reports the following hazardous substances to be present in wastewater discharged from the Site:

- Copper
- Lead
- Cyanide
- Nickel

(SAN000036 at Tab 6, SAN000092 at Tab 7)

In 1978, PVSC conducted a Heavy Metals Source Determination Study. According to the report, the following hazardous substances were detected in the Site's wastewater:

- Cadmium 0.006 mg/L
- Chromium 0.014 mg/L
- Copper 0.120 mg/L
- Lead -0.075 mg/L
- Nickel 0.048 mg/L
- Zinc 0.062 mg/L
- Arsenic 0.001 mg/L
- Mercury 0.002 mg/L

(KLL013775 at Tab 5, KLL013832 at Tab 5)

Any hazardous substances listed above would have been present in the facility's wastewater during the time of any permit violations (detailed in the nexus section below).

PERMITS (provide dates):

NPDES:

NJPDES DSW Permit #NJ0088315, expiration date of May 31, 2007. (SAN000125 at Tab 11)

PVSC (pretreatment):

Sandvik Coromant Company's Sewer Use Permit # 08220005 is effective February 1, 2006 through January 31, 2011. The prior issue of Permit # 08220005 was effective from February

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25, 2001 through January 31, 2006. (SAN000006-SAN000028 at Tab 1, SAN000065-SAN000086 at Tab 18)

The prior permit # 08401682 was effective from February 24, 1996 through February 24, 2001. (SAN000110-SAN000113 at Tab 19)

Other:

Town of Fair Lawn - cryogenics Permit #03-2181

Town of Fair Lawn - bleach, caustic soda, acids Permit #03-2184

(SAN000126 at Tab 11)

NEXUS TO LOWER PASSAIC RIVER STUDY AREA (describe in detail; cite to supporting documentation; date or time period of disposal; list CERCLA hazardous substances; and volume, if known):

Direct (e.g. pipe, outfall, spill):

No information is available at this time.

Sanitary Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

All dischargers into "navigable waters" of the United States were required under the Federal Water Pollution Control Act Amendments of 1972 to apply for a NPDES permit from the USEPA. PVSC received its NPDES Permit, effective February 28, 1975. (KLL004868 at Tab 21, KLL006250 at Tab 22)

As of April 8, 1976, PVSC adopted its "Rules and Regulations of the PVSC Concerning Sewer Connection Permits" and provided as of April 12, 1976, to each "user municipality" in the PVSC system for their adoption and use. (KLL005050-51 at Tab 23)

The facility is connected to the Yantacaw Street Outfall. (KLL017720 at Tab 24) The 1975 NPDES Permit for PVSC included the Yantacaw Street Bypass located at the confluence of Third River and Passaic River in Clifton as one of the "permitted" discharge point to the Passaic River. (KLL006262 at Tab 22)

When the Yantacaw bypass was opened, all of the upstream waste from that point was bypassed. Thus, "when the Yantacaw was opened, the waste from...many other municipalities upstream of Third River, went into the River" (KLL019531 at Tab 25). According to the Lubetkin Affidavit, the Yantacaw Street Bypass:

"Carried all the effluent handled by the PVSC upstream of the junction of the Third River and the Passaic River. This outfall was the largest bypass in the system" (KLL019526 at Tab 25).

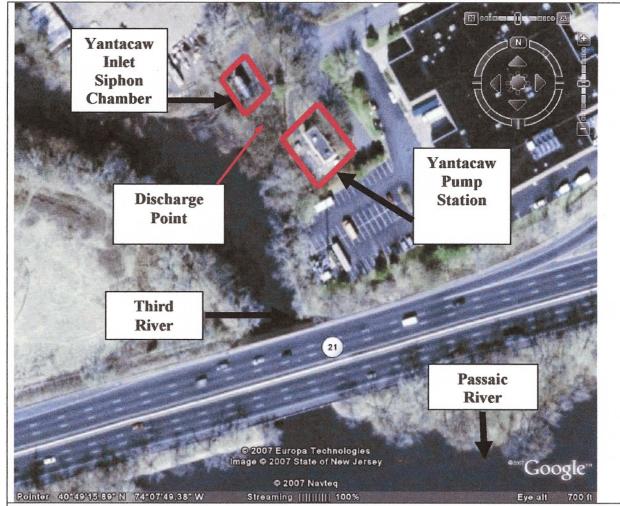
The Yantacaw Bypass had two sets of gates operated by hoists. One set of hoists was set in the trunk line and the other set was located on the outfall to the Passaic River. Normally, "the gate to the trunk line was open and the gate to the Passaic River was closed." When it was required to bypass the trunk line, a bypass crew opened the gate to the River and closed the gate to the trunk line. In doing so, all of the sewage in the trunk line upstream of the Third River was bypassed. (KLL019528 at Tab 25) During periods of rain, one of the options to control the flow of waste in the trunk line was to open the Yantacaw Bypass, or "throw Yantacaw." (KLL019528 at Tab 25)

Several times each year when the River flow rose significantly but the volume received at the treatment plant fell below the average daily flow for the year, the Yantacaw Street bypass was "thrown," thus bypassing all the waste it carried to the River (KLL019529 at Tab 25).

The outfall serves "all domestic and industrial flow upstream to terminus of PVSC." This interceptor is the main interceptor in the Paterson area. (KLL017719 at Tab 24)

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The following annotated aerial photograph identifies the approximate location of the Yantacaw Street Bypass:



Yantacaw Street Bypass Clifton, NJ

Aerial Photo Copyright 2007
Photo Source: Google Earth (Europa Technologies/State of New Jersey/Navteq)

Site boundary line locations as shown are approximations

(KLL017720 at Tab 24)

1955 to February 27, 1975

Sandvik was reported to have commenced operation at the subject Fairlawn facility in 1955. Further, the PVSC NJPDES permit was issued effective February 28, 1975 (SAN000122 at Tab 11, SAN000153 at Tab 12, KLL004868 at Tab 21, KLL006250 at Tab 22) The Sandvik wastewater discharge to the PVSC system, (including the Yantacaw Street bypass location), was

likely bypassed to the Passaic River from the beginning of Site operations in 1955 until February 28, 1975 (i.e., the effective date of PVSC's NJDPES permit). Based on this documented time period, such wastewater releases were not covered by a federal permit. The facility's discharge during this period would have contained hazardous substances, as reflected in more contemporaneous sampling of that effluent and as noted below. In summary, discharge from this facility was released to the Passaic River over an approximately 20 year period without a federal permit.

February 28, 1975 to Present

As noted above, the PVSC NJPDES permit was issued effective February 28, 1975. (KLL004868 at Tab 21, KLL006250 at Tab 22) Following the issuance of PVSC's NJDPES permit, Sandvik's discharge to the PVSC system would have likely been bypassed to the Passaic River, with violations of the company's PVSC pre-treatment permit noted as follows.

In its "Pretreatment Annual Report Number 12", dated 09/08/1995 and issued by PVSC for the period 08/01/1994 through 07/31/1995, Sandvik was one of several companies listed by PVSC as "non-categorical companies – local limit violations. PVSC noted in its report that Sandvik was still not in compliance for the local limit violation as of 07/31/1995. No further details as to the specific violation were provided in the report. (ABC150673 at Tab 32, ABC150675 at Tab 32)

In the PVSC Pretreatment Annual Report Number 13, dated 09/10/1996, for the period from 08/01/1995 through 07/31/1996, dated 09/08/1995, Sandvik was listed by PVSC as a "non-categorical companies – local limit violations". PVSC noted in its report that Sandvik was in compliance for the local limit violation as of the publishing of the annual report. Sandvik was indicated as having been placed under a compliance schedule by PVSC for pH, and as having completed the compliance schedule by 10/15/1995. (ABC150864 at Tab 33, ABC150866 33, ABC150994 33)

In the subsequent PVSC Pretreatment Annual Report Number 15, dated 09/09/1998, and for the period 08/01/1997 through 07/31/1998, Sandvik was noted as having paid a fine to PVSC during the period of the annual report. No further details as to the specific violation and the amount of the fine were provided in the report. (ABC151336 at Tab 34)

In July of 1999, PVSC issued a Notice of Violation to Sandvik for pH non-compliance that occurred in May 1999. (SAN000175 at Tab 26)

In April of 2002, PVSC reported that Sandvik had exceeded the PVSC Sewer Use Connection Permit threshold for copper in March of 2002. The following metals were also found in the sample collected from Outlet #1:

- Cadmium at 0.006 mg/L
- Copper at 0.128 mg/L
- Lead at 0.060 mg/L
- Nickel at 0.044 mg/L
- Zinc at 0.037 mg/L

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(SAN000029-SAN000030 at Tab 27)

In the PVSC Pretreatment Annual Report Number 20, dated 08/29/2003, and for the period 08/01/2002 through 07/31/2003, Sandvik was noted as having paid a fine to PVSC during the period of the annual report. No further details as to the specific violation and the amount of the fine were provided in the report. (ABC151900 at Tab 35)

In September 2003, PVSC issued a Notice of Violation to Sandvik for pH non-compliance which occurred on July 18, 2003. (SAN000149 at Tab 28)

Storm Sewer:

No information is available at this time.

Runoff:

No information is available at this time.

Groundwater:

No information is available at this time.

POTENTIAL NEXUS TO LOWER PASSAIC RIVER STUDY AREA (describe in detail; cite to supporting documentation; list CERCLA hazardous substances; and volume, if known):

Direct (e.g. pipe, outfall, spill):

On April 18, 1972, a PVSC Site inspection revealed oil, originating from the Site, entering Henderson Brook. This discharge was eventually traced to a broken oil pressure gauge, which was causing oil to flow from this gauge to a sump and eventually being pumped into Henderson Brook via a 24" storm drain. The exact amount of the release was undetermined. (KLL004520-4521 at Tab 20) According to the 1975 PVSC Annual Report, Henderson Brook enters the Passaic River at Hawthorne (KLL004860 at Tab 21, KLL004862 at Tab 21).

Based on analysis of this documentation, the potential exists that hazardous substances found in facility soils and other media may have been transported via this oil runoff to the sump and then to Henderson Brook.

Sanitary Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

No information is available at this time.

Storm Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

No information is available at this time.

Runoff:

No information is available at this time.

Groundwater:

A 1978 Administrative Consent Order issued by NJDEP reports that two private non-potable wells and three public potable wells in the Borough of Fair Lawn were found to be contaminated with high concentrations of volatile organic chemicals including chloroform, 1,1,1-trichloroethane, carbon tetrachloride and 16 other volatile organics. An inspection of the Sankvik Site revealed a waste burial area, solvent transfer areas, a subsurface waste oil tank and drum storage areas. After NJDEP conducted an industrial survey and the subsequent comprehensive site investigation, it was determined that Sandvik was one of the sources contributing to the groundwater contamination. It should be noted that the confluence of Henderson Brook and the Passaic River is located above the Dundee Dam (SAN000062-64 at Tab 16, SAN000264-265 at Tab 29).

Based on analysis of this documentation, the potential exists that contaminated groundwater from the site may impact the adjacent Henderson Brook.

In March 2006, a notice of potential liability letter was issued by EPA to Sandvik and two other companies (Fischer Scientific and Kodak) for the Fair Lawn Well Field site. As of December 7, 2006, the three companies have collectively responded to the notice and "are negotiating with EPA on a settlement to complete the work and reimburse the agency for costs expended to date." They are also addressing contamination found on their properties through ACO's with NJDEP." (SAN000265 at Tab 29)

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February 1, 2007

Mr. Andy Caltagirone
Passaic Valley Sewage Commissioners
600 Wilson Ave.
Newark, NJ 07105

Re: Industrial outlet # 0822005

Dear Bruce Wrede,

Please find enclosed our terminated Sewage Use Permit.

For any additional information regarding this or any other matter, I can be reached at 201-794-5106 or by E-mail at Albert.Mips@Sandvik.com

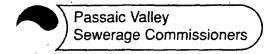
Sincerely, Albert W. Mips

pu w. d

Facilities Engineering Manager

Tel.: 201-794-5000

Fax: 201-794-5165



THOMAS J. POWELL. Chairman

CARL S CZAPLICKI, JR Vice Chairman

FRANK J. CALANDRIELLO WILLIAM F. FLYNN ALAN C. LEVINE ANTHONY J. LUNA ANGELINA M PASERCHIA KENNETH R. PENGITORE Commissioners ~Established 1902~

600 WILSON AVENUE NEWARK, NJ 07105 (973) 344-1800 Fax: (973) 344-2951 www.pvsc.com

Industrial Department Fax: (973) 344-4876 January 25, 2007 BRYAN J. CHRISTIANSEN Executive Director

JAMES KRONE
Deputy Executive Director

JOSEPH FERRIERO Chief Counsel

ANTHONY W. ARDIS Clerk

CERTIFIED MAIL 7002 0860 0004 7767 7393

Sandvik Coromant Company 1702 Nevins Road Fairlawn, New Jersey 07410

Attn: William Durow

RE: TERMINATION OF SEWER USE PERMIT I.D. #: 08220005

Dear Mr. Durow:

This letter is to advise you that based on the information you provided to Passaic Valley Sewerage Commissioners, as well as through final site inspection, your Sewer Use Permit (SUP) is being terminated. Your last MR-1, MR-2 & MR-3 submissions will cover the period 11/01/06 through 11/30/06. If for any reason there is a change in your operation, you must apply to PVSC for a new SUP. Kindly return your SUP to PVSC within 5 days of receipt of this letter.

If you have any questions concerning this matter, please contact Bruce Wrede of my staff at (973) 817-5714.

Very truly yours,

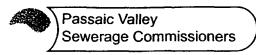
PASSAIC VALLEY SEWERAGE COMMISSIONERS

Andy Caltagirone

Manager of Industrial & Pollution Control

AC/np

Bryan J. Christiansen, Executive Director
 George McGehrin
 Bruce Wrede
 Borough of Fairlawn



DONALD TUCKER Chainnan

CARL S CZAPLICKI, JR. Vice Chairman

ANTHONY W. ARDIS FRANK J. CALANDRIELLO ALAN C. LEVINE ANTHONY J. LUNA ANGELINA M. PASERCHIA KENNETH R. PENGITORE THOMAS J. POWELL Commissioners ~Established 1902~

600 WILSON AVENUE NEWARK, NJ 07105 (973) 344-1800 Fax: (973) 344-2951 www.pvsc.com BRYAN J CHRISTIANSEN Executive Director

JAMES KRONE
Deputy Executive Director

JOSEPH FERRIERO Chief Counsel

LOUIS LANZILLO Clerk

Industrial Department Fax: (973) 344-4876 January 13, 2006

CERTIFIED RECEIPT 7002 0860 0004 7767 7638

Sandvik Coromant Company 1702 Nevins Road Fair Lawn, NJ 07410 Attn: William Durow

RE: PERMIT # 08220005

Dear Mr. Durow:

Enclosed is your Sewer Use Permit issued for the period 02/01/2006-01/30/2011 to the facility located at 1702 Nevins Road, Fair Lawn, New Jersey. In accordance with Section 602.2 of the Passaic Valley Sewerage Commissioner Rules and Regulations a Permit fee has been assessed to your company.

This fee will be collected in equal annual installments over the life of the Permit. The fee for your company is \$1500 with an annual payment of \$300. Your first invoice for \$300 will be sent under separate cover by the PVSC Finance Department. If you have any questions, you may contact Marc Picinich at (973) 817-5986.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Andy Caltagirone

Manager of Industrial & Pollution Control

AC/rl

Enclosure

c: Bryan J. Christiansen, Executive Director

George McGehrin Marc Picinich Borough of Fair La

Borough of Fair Lawn

PASSAIC VALLEY SEWERAGE COMMISSIONERS

SEWER USE PERMIT

| | r |
|----------|----------|
| Permit # | 08220005 |
| | |

(Please use the Permit Number on any correspondence with PVSC) In compliance with the provisions of the Federal Water Pollution Control Act, its amendments, the Clean Water Act and Rules and Regulations of the Passaic Valley Sewerage Commissioners

SANDVIK COROMANT COMPANY

(herein, after referred to as the Permittee) is authorized to discharge from a facility located at

1702 NEVINS ROAD

FAIR LAWN, NEW JERSEY 07410

to the Passaic Valley Sewerage Commissioners Treatment Works in accordance with discharge limitations, monitoring requirements and other conditions set forth herein.

EFFECTIVE DATE

02/01/2006

EXPIRATION DATE

01/31/2011

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Bryan J. Christiansen

Executive Director

SECTION A

CONDITION SPECIFIC TO THIS PERMIT

1. Sampling

- 1.1 Samples and measurements taken as required under this permit shall be representative of the monitored activity. All samples shall be taken at the monitoring points approved by the PVSC and specified in this permit. Unless other wise specified, all samples shall be drawn by a 24-hour composite sampler acceptable to the PVSC which shall be equipped with attachments appropriate for affixing seals. During and after collection, the sample shall be maintained between 1°C 4°C.
- 1.2 In addition to the other sample requirements set forth in SECTION A, PART 2 of this permit, the Permittee shall comply with the following:
 - (a) For User Charge the Permittee shall install a 24 hour composite sampler on Outlet (s) #1 which shall be maintained in proper working order at all times.
 - (b) Samples that are taken for heavy metal analysis must be drawn by an automatic 24-hour composite sampler. A grab sample is not acceptable for metals compliance determination.

PASSAIC VALLEY SEWERAGE COMMISSIONERS 600 WILSON AVENUE NEWARK, NEW JERSEY 07105

SIU FACT SHEET

Sewer Use Permit to discharge into Passaic Valley Treatment Plant

Sandvik Coromant Company has submitted a completed Sewer Use Application for a Sewer Use Permit Renewal to discharge into the treatment works.

| NAME & ADDRESS OF APPLICANT | NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS |
|--------------------------------|---|
| Sandvik Coromant Company | Sandvik Coromant Company |
| 1702 Nevins Road | 1702 Nevins Road |
| Fair Lawn, New Jersey 07410 | Fair Lawn, New Jersey 07410 |

Description of Facility Operations: Mfg. of Carbide Cutting Tools

Million Gallons per Day (MGD) Industrial Wastewater: Approx. - .063 MGD

Number of Outlets: Industrial - 1 Sanitary - 1

Sample Point Location: PVSC Local Limit sample point is located on the outside in

the discharge line at the southeast corner of the G.C. Process

Building.

Cyanide sample points are located before the connection to the cyanide destruct system and downstream of the cyanide

destruct system.

Basis for Permit Conditions: User Charge & Pretreatment Equipment

Type of Pretreatment Equipment Installed: Continuous pH Recorder

Duration of Sewer Use Permit: 5 years

Special Conditions or Remarks: Renewal, no changes. This company is subject to

PVSC Local Limits.



(a) Beginning (02/01/2006) and lasting through (01/31/2011) the Permittee is authorized to discharge from outlet # (08220005-1). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C) (8 inch discharge line-G.C.area). The sample point is located on the outside in the discharge line at the southeast corner of the G.C. Process Building. The Permittee shall submit volume and analysis results in accordance with PVSC User Charge Self-Monitoring Report Form MR-2.

| EFFLUENT CHARACTERISTIC | DISCHARO | GE LIMITATIO | MONITORING REQUIREMENTS | | |
|----------------------------|--------------------|--------------|--------------------------|----------------|---------------------|
| PARAMETER | MONTHLY AVERAGE | DAILY MAX | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| BOD | XXXXX | xxxxx | Monthly | 24 hr. comp. | Monthly |
| TSS | xxxxx | xxxxx | Monthly | 24 hr. comp. | Monthly |
| pН | xxxxx | 5 to 10.5 | Continuous | Recorder | * |
| Volume | XXXXX | XXXXX | XXXXX | xxxxx | Monthly |

^{*} Permittee to store pH Recorder Charts and have available for review by PVSC personnel on demand.



(a) Beginning (02/01/2006) and lasting through (01/31/2011) the Permittee is authorized to discharge from outlet # (08220005-2). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. The volume shall be determined from the readings on the city meter (A) less the readings of the process meter (B) on Outlet #1 (10 inch discharge line – shipping area). The Permittee shall submit volume and analysis results in accordance with PVSC User Charge Self-Monitoring Report Form MR-2.

| EFFLUENT CHARACTERISTIC | DISCHARO | GE LIMITAT | MONITORING REQUIREMENTS | | |
|----------------------------|--------------------|------------|-------------------------|----------------|------------------|
| PARAMETER | MONTHLY AVERAGE | | | SAMPLE TYPE | REPORTING PERIOD |
| BOD | XXXXX | XXXXX | N/A* | N/A | XXXXX |
| TSS | xxxxx | XXXXX | N/A* | N/A | XXXXX |
| Volume | xxxxx | xxxxx | xxxxx | xxxxx | Monthly |

^{*} Concentrations for User Charge to be determined from Residential Strength Standards.



(b) Beginning (02/01/2006) and lasting through (01/31/2011) the Permittee is authorized to discharge from outlet # (08220005-1). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet (before treatment). The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C) (8 inch discharge line – G.C. area). The sample point is located before the connection to the cyanide destruct system. The Permittee shall submit volume and analysis results in accordance with PVSC Pretreatment Discharge Monitoring Report form MR-1.

| | DIS | CHARGE LIMITA | MONITORING REQUIREMENTS | | |
|-----------|--------------------|---------------|--------------------------|----------------|---------------------|
| PARAMETER | MONTHLY AVERAGE | DAILY MAX | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| CN (T) | xxxxx | XXXXX | Quarterly | Grab | Monthly |
| Volume | xxxxx | xxxxx | xxxxx | XXXXX | Monthly |



(b) Beginning (02/01/2006) and lasting through (01/31/2011) the Permittee is authorized to discharge from outlet # (08220005-1). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet (after treatment). The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C) (8 inch discharge line – G.C. area). The sample point is located downstream of the cyanide destruct system. The Permittee shall submit volume and analysis results in accordance with PVSC Pretreatment Discharge Monitoring Report form MR-1.

| | DIS | CHARGE LIMITA | MONITORING REQUIREMENTS | | |
|-----------|--------------------|---------------|-------------------------|---------|-----------|
| PARAMETER | MONTHLY AVERAGE | DAILY MAX | PARAMETER | MONTHLY | DAILY MAX |
| CN (T) | XXXXX | XXXXX | Quarterly | Grab | Monthly |
| Volume | XXXXX | XXXXX | xxxxx | XXXXX | Monthly |

2. MONITORING REQUIREMENTS AND DISCHARGE LIMITATIONS

(b) Beginning (02/01/2006) and lasting through (01/31/2011) the Permittee is authorized to discharge from outlet # (08220005-1). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C) (8 inch discharge line-G.C.area). The sample point is located on the outside in the discharge line at the southeast corner of the G.C. Process Building. The Permittee shall submit volume and analysis results in accordance with PVSC Pretreatment Discharge Monitoring Report Form MR-1.

| PVSC LOCAL LIMITS DISCHARGE LIMITATIONS | | | MONITORING REQUIREMENTS | | | |
|---|----------------------------|----------------------------|--------------------------|----------------|---------------------|--|
| PARAMETER | mg/l MONTHLY AVERAGE | mg/l THRESHOLD VALUE | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD | |
| Cd | 0.19 | 0.005 | Monthly | 24 hr. comp. | Monthly | |
| Cu | 3.02 | 0.092 | Monthly | 24 hr. comp. | Monthly | |
| Pb | 0.54 | 0.029 | Monthly | 24 hr. comp. | Monthly | |
| Hg | 0.080 | 0.001 | Monthly | 24 hr. comp. | Monthly | |
| Ni | 5.9 | 0.02 | Monthly | 24 hr. comp. | Monthly | |
| Zn | 1.67 | 1.67 | Monthly | 24 hr. comp. | Monthly | |
| Volume | XXXXX | XXXXX | xxxxx | XXXXX | Monthly | |

SANDVIK COROMANT COMPANY - #08220005

3. SCHEDULE OF COMPLIANCE

The Permittee is required to meet the following schedule of compliance:

- A. Analysis of wastewater parameters shall be performed by a laboratory that has been certified by the State of New Jersey. Permittee is required to submit all certified analyses as an attachment to the monthly MR-1 and/or MR-2 report.
- B. The Permittee is required to submit as an attachment to the MR-1 and/or MR-2 report monthly, a water balance showing meter readings used to calculate the reported volume discharged.
- C. Permittee to submit a periodic compliance monitoring report MR-2 form for monthly reporting requirements within twenty-one (21) days after the end date of each preceding month.
- D. Permittee to be in compliance with PVSC Local Limits.
 - Permittee to submit a periodic compliance monitoring report MR-1 form for monthly reporting requirements within thirty-five (35) days after the end date of each preceding month in accordance with General Pretreatment Regulations 40 CFR 403.12 section (e).
- E. If the Permittee has been authorized by the PVSC to certify for non-use for one or more heavy metals, the Permittee must sample the discharge in March and September of each year in order to prove continued compliance. If any analytical results exceeds the Threshold Value, but not the Local Limit, the Permittee shall analyze a sample each succeeding month until three successive monthly results are at or below the Threshold Value stated in the PVSC Rules and Regulations Section B-103.3 Table B-2.
- F. When final pretreatment standards are promulgated Permittee shall submit a baseline monitoring report to PVSC in accordance with 40 CFR 403.12 and any subsequent revisions (copy attached).
- G. The Permittee shall notify in writing, all agencies as directed by 40 CFR 403.12 (p) of any discharges classified hazardous waste under 40 CFR 261.

SECTION B



1. GENERAL

- 1.1 The Permittee shall comply with all conditions set forth in this permit and all applicable requirements which are set forth in N.J.S.A. 58:14-1 et seq. and the Rules and Regulations of the PVSC, as well as the Federal Clean Water Act, 33 U.S.C.A. § 1251 et seq. and the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. Failure to comply with all the terms and conditions of this permit shall constitute a violation of the Rules and Regulations of the PVSC.
- 1.2 All discharges shall be consistent at all times with the terms and conditions of this permit and no regulated pollutant shall be discharged more frequently than authorized or at a level in excess of that which is authorized by this permit.
- 1.3 The Permittee shall not discharge or deposit or cause or allow to be discharged or deposited into the Treatment Works or public sewer, any waste which causes or contains the following
- (a) <u>Explosive Wastes</u> Wastes in such quantity which may create a fire or explosion hazard to the Treatment Works, collection system or to the operation of the system, including but not limited to, wastewater with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21. Additional quantitative limitations on explosive wastes are specified in Appendix B.
- (b) <u>Corrosive Wastes</u> Wastes in such quantity which may cause corrosion or deterioration of the Treatment Works. Unless a higher limit is otherwise stated in the Sewer Use Permit issued to a user, all wastes shall have a pH not less than 5. Unless otherwise stated in the Sewer Use Permit, all wastes shall have a pH not more than 10.5. If PVSC requires the installation of a continuous pH recorder, the Permittee may exceed the upper or alkaline pH limit subject to the conditions contained in subsection 317. Prohibited materials include, but are not limited to, acids, sulfides, concentrated chloride or fluoride compounds, etc.

- (c) <u>Solids or Viscous Wastes</u> Solids or viscous wastes in amounts which may cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the Treatment Works. Prohibited materials include, but are not limited to, uncomminuted garbage, bones, hides, or fleshings, cinders, sand, stone or marble dust, glass, etc.
- (d) Floatable Pollutants (1) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through, (2) any wastes containing floatable fats, wax, grease, oils, or any other floatable pollutants, (3) any industrial wastes containing more than 100 mg/l of petroleum based oil or grease.
- (e) <u>Noxious Materials</u> (1) Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems, (2) noxious liquids, or gases, which in sufficient quantity either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or are or may be sufficient to prevent entry into a sewer for its maintenance and repair.
- (f) Radioactive Wastes Radioactive wastes or isotopes of such half life or concentration that they do not comply with regulations or orders issued by the appropriate authority having control over their use and which will, or may, cause damage or hazards to the Treatment Works or personnel operating the system.
- (g) <u>Interference/Pass through</u> Any waste, including discharges of oxygen demanding wastes (BOD, etc.) released or discharged at a flow rate and/or pollutant concentration which causes or threatens to cause an upset at the PVSC Treatment Works, or which causes or threatens to cause a violation of the PVSC's NJPDES Permit conditions.
- (h) Excessive Discharge Rate Industrial wastes discharged in a slug or such volume or strength so as to cause a treatment process upset and subsequent loss of treatment efficiency.
- (i) <u>Heat</u> (1) Any discharge in excess of 150°F (65°C). (2) Heat in amounts which would inhibit biological activity in the PVSC Treatment Works resulting in a treatment process upset and subsequent loss of treatment efficiency.

- (j) <u>Unpolluted Waters</u> Any unpolluted water including, but not limited to, cooling water and uncontaminated storm water, which will increase the hydraulic load on the Treatment System, unless specifically authorized by PVSC in accordance with Sections 301, 303, 602.5 of these Rules and Regulations.
- (k) <u>Dilution Increase</u> in the use of process water, or an attempt in any other way, to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a pretreatment standard or effluent limit.
- (l) <u>Violations</u> Wastes, which cause the PVSC treatment plant to violate its NJPDES Permit, applicable, receiving water standards, permit regulating sludge which is produced during treatment or any other Permit issued to PVSC.
- (m) <u>Ultra Hazardous Toxics</u> Those wastes designated by EPA as sufficiently toxic that they shall not be discharged to the sanitary sewer in any concentrations.
- (n) <u>Trucked Pollutants</u> Any trucked or hauled pollutants, accepted at discharge points designated by the Chief Executive Officer, and only after approval is issued by PVSC.
- (o) <u>Ground Water</u> Any ground water, whether contaminated or uncontaminated, unless specifically authorized by PVSC in accordance with Sections 301, 303, and 602.5 of these Rules and Regulations.
- (p) <u>Stormwater</u> Any stormwater, whether contaminated or uncontaminated, unless specifically authorized by PVSC in accordance with Sections 301, 303 and 602.5 of these Rules and Regulations.
- (q) <u>Bypassed Wastes</u> Any wastewaters which would normally be monitored or pretreated, but are discharged to the sanitary sewer without being monitored or pretreated, unless specifically authorized by PVSC.
- (r) <u>Excess Heel Material</u> Any quantity of trucked or hauled material meeting the definition as contained herein, unless authorized by PVSC.

- 1.4 The Permittee shall not discharge or convey or permit to be discharged or conveyed to the PVSC Treatment Works any wastes containing pollutants of such character or quantity that.
 - (a) Impairs the PVSC's ability to protect the health and safety of the treatment plant workers.
 - (b) Will not be susceptible to treatment or will interfere with the process or efficiency of the Treatment Works.
 - (c) Violate any federal categorical pretreatment standard. As pretreatment standards for toxic or other hazardous pollutants are promulgated by USEPA for a given industrial category, all industrial users within that category shall conform to the USEPA timetable as well as any numeric limitations imposed by the USEPA.
 - (d) Violate a local limit imposed or adopted by the PVSC.
 - (e) Violate a Best Professional Judgment limit imposed or adopted by the PVSC.
 - (f) Cause the PVSC treatment plant to violate its NJPDES Permit, applicable receiving water standards, regulations and/or any permits governing sludge which is produced during treatment process, or any other permit issued to the PVSC.
 - 1.5 The Permittee shall at all times maintain in good working order and operate all pretreatment control and monitoring equipment in strict accordance with all design specifications and manufacturer recommendations. Proper operation and maintenance includes, at a minimum, effective performance based upon specifications designed to meet applicable effluent limits, adequate funding, adequate operator staffing and training and adequate laboratory and process controls.

1.6. The Permittee shall dispose of all solids, sludges, filter backwash or other pollutants or hazardous waste removed in the course of pretreatment or control of wastewaters and/or the treatment of the intake waters, in accordance with applicable Federal, State and local laws and regulations. Records documenting such disposal shall be made available to the PVSC for review upon request.

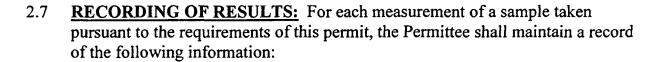
2. <u>INDUSTRIAL WASTE REPORTING</u>

- 2.1 <u>USER CHARGE:</u> User Charge monitoring results obtained during the previous month shall be reported monthly on a Discharge Monitoring Report Form (MR-2). The due date for properly signed reports shall be 21days after the reporting period ends. If the 21st day falls on a Saturday, Sunday or PVSC Holiday, then the report shall be due on the next PVSC work day. If the Permittee fails to submit the MR-2 Report on a timely basis the Executive Director shall estimate the usage for the period. The estimate may be made thirty (30) days after the due date of the report.
- 2.2 PRETREATMENT: Pretreatment monitoring results obtained during the previous month shall be reported monthly on a Discharge Monitoring Report Form (MR-1). The due date for properly signed reports, shall be 35 days after the reporting period ends. If the 35th day falls on a Saturday, Sunday or PVSC Holiday, then the report shall be due on the next PVSC work day.
- 2.3 <u>DUE DATE:</u> MR-1 and MR-2 Reports must be physically delivered to the PVSC by Midnight of the date by which they are due. The use of certified mail or other means to document or guarantee delivery may be used if deemed necessary. Postmarks are not valid to demonstrate compliance with the due date requirement.

2.4 MAILING ADDRESS: Reports required herein must be addressed to:

PASSAIC VALLEY SEWERAGE COMMISSIONERS ATTN: INDUSTRIAL DEPARTMENT 600 WILSON AVENUE NEWARK, NEW JERSEY 07105

- 2.5 **FACSIMILE:** The Permittee may meet the requirement for submission by sending the report(s) via facsimile provided the report is received at the PVSC on any date up to and including the due date. In addition the due date for a hard copy of the same report shall be four (4) days after the transmission of the facsimile. Failure to deliver the hard copy by the due date specified shall result in the report being considered as not having been received and shall constitute a violation of the permit.
- 2.6 <u>ANALYTICAL PROCEDURES:</u> Analytical results for BOD, TSS or any other parameter as required by this permit shall be reported on the date that the sample was removed from the sampling device for analysis. The following procedure shall be used when reporting analytical results:
 - (a) the pollutant limit will define the precision, or number of digits to the right or left of the decimal point, to be reported.
 - (b) Calculated results shall be rounded off to the same precision as defined for that pollutant in the limit.
 - (c) Zeros in the pollutant limit are included in order to determine the precision.
 - (d) The following procedure shall be followed when rounding off results:
 - (i) round off by dropping digits that are irrelevant. If the digit 6,7,8 or 9 is to be dropped, increase the preceding digit by one unit.
 - (ii) If the digit 0,1,2,3 or 4 is to be dropped, do not alter the preceding digit.
 - (iii) If the digit 5 is to be dropped, round off the preceding digit to the nearest even number (2.25 becomes 2.2 while 2.35 becomes 2.4).



- (a) The date, exact places and time of sampling;
- (b) The dates the analysis were performed;
- (c) The person(s) who performed the analysis;
- (d) The analytical techniques or methods used; and
- (e) The results of all required analyses.
- 2.8 <u>RECORDS RETENTION:</u> The Permittee shall maintain such records as necessary to demonstrate compliance with the requirements of this permit, the PVSC Rules and Regulations and any applicable State or Federal Pretreatment standard or requirement. All records and information resulting from the monitoring activities required by this permit including, all records of analysis performed, calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of five years.
- 2.9 <u>SEWER USE APPLICATION (SUA) RENEWAL:</u> The Permittee shall submit a renewal SUA within 180 days of the expiration of current Sewer Use Permit.

3. <u>INDUSTRIAL WASTE MONITORING</u>

- 3.1 MONITORING EQUIPMENT: The Permittee shall install, at his own cost and expense, whatever monitoring equipment is required by the conditions of this permit to facilitate the accurate observation, sampling and measurement of the discharge. Such equipment shall be kept safe, secured from unauthorized entry or tampering and accessible at all times. Monitoring equipment shall be calibrated as recommended by the manufacturer, except that LEL recorder shall be calibrated daily and pH recorders shall be calibrated at least weekly, which ever is more frequent.
- 3.2 Permittee shall safeguard any PVSC monitoring equipment that is installed at their facility. Permittee shall reimburse PVSC for any equipment that is either damaged or stolen from its point of installation. Reimbursement costs will be determined by PVSC.

- 3.3 The volume of each sample shall be proportional to the discharge flow rates unless specifically modified by PVSC. For a 24 hour continuous discharge, a minimum of 24 individual samples shall be collected at equal intervals and at least once per hour. For a continuous discharge of less than 12 hours, individual samples shall be taken at least once every 30 minutes. For discharges which are not continuous, individual samples shall be taken such that they will be representative of the plant waste water discharge.
- 3.4 Permittee shall notify the PVSC as soon as possible, but in no case later than 2 hours from becoming aware of the same, if a sampling, monitoring, recording or other device required in accordance with this permit becomes inoperable.

 Unless otherwise directed by the PVSC, the Permittee shall submit a written report to the PVSC, attention Industrial and Pollution Control Department, within 5 working days of the occurrence detailing what occurred, why it happened, what will be done to correct the problem and a date when the problem will be corrected. If the PVSC approves the corrective action and it is expected to take more than two months from the date of occurrence to complete, the Permittee shall submit monthly progress reports until such time as the problem is corrected.
- 3.5 NOTIFICATION OF NON-COMPLIANCE: If, for any reason, the Permittee does not comply with or will be unable to comply with any effluent limitation specified in this permit, or discharges any waste and meets the Slug Discharge Definition as defined in Appendix A of the PVSC Rules and Regulations, the Permittee shall notify the PVSC within 24 hours of such occurrence.
- 3.6 If this report is made orally, a written report containing the following information, shall be submitted within five (5) working days:
 - (a) A description of the discharge and the cause of the period of noncompliance;
 - (b) The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and
 - (c) The steps being taken to reduce, eliminate and prevent a recurrence of the non-complying discharge.

- 3.7 The Permittee shall take all reasonable steps to minimize any adverse impact to the PVSC Treatment Works resulting from noncompliance with any pretreatment limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge. This condition in no way affects PVSC's right to suspend a permit in order to stop a discharge which presents an imminent or substantial hazard to the public health, safety or welfare to the local environment or which interferes with the operation of the PVSC Treatment Works.
- 3.8 **TEST PROCEDURES:** Samples and measurements taken as required in this permit shall be representative of the volume and nature of the monitored discharge.
- 3.9 The Permittee shall perform all analyses in accordance with the test procedures identified under 40 C.F.R. Part 136. All test procedures, other than those identified in 40 C.F.R. Part 136, shall be considered as alternative test procedures. The Permittee is authorized to utilize an alternative test procedure only if prior written approval is received from the Chief Executive Officer in accordance with Section 319.2 of the Rules and Regulations of the PVSC.
- 3.10 Sample analyses of pollutants required by this permit shall be performed by a laboratory with a New Jersey certification for each pollutant analyzed.
- 3.11 If the Permittee monitors any pollutant at the location(s) designated more frequently than required by this permit using the approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the applicable Discharge Monitoring Report Form (PVSC Form MR-1 or MR-2). Such increased frequency shall also be indicated.

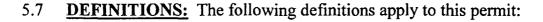
4. MANAGEMENT RESPONSIBILITIES

- 4.1 **RIGHT OF ENTRY:** The Permittee shall allow the authorized representatives of the PVSC, upon presentation of credentials to:
 - (a) Have immediate access to all the facilities directly or indirectly connected to the PVSC Treatment Works during normal working hours and at such other times as may be necessary during emergencies as determined by PVSC. No person shall interfere with, delay, or refuse entrance to a PVSC Inspector attempting to inspect the facility.
 - (b) Inspect the monitoring equipment and monitoring methods required in this permit or to sample any discharge of wastewater, copy any records required to be kept by this permit or PVSC Rules and Regulations and inspect and/or sample RCRA or other type waste or substances.
- 4.2 TRANSFER OF OWNERSHIP OR CONTROL: This Permit is not transferable. This permit shall not be reassigned, transferred or sold to a new owner, new industrial user, or a new or changed operation. The Permittee shall notify the Chief Executive Officer in writing within (14) days of any sale or transfer of the industrial operations/facility covered by this Permit, or of any sale or transfer affecting the identity of those holding a controlling interest in the Permittee. The Permittee shall also provide written notice to the succeeding owner or controller of the existence of this Sewer Use Permit and the need to apply for a new permit. For purposes of this provision, the term "controlling interest" shall mean an interest held by a person or entity, or group of persons or entitles, who possess, directly or indirectly, the power to direct or cause the direction of the management and policies of the Permittee.
- 4.3 <u>CHANGE IN DISCHARGE:</u> Any change in the discharge, any anticipated facility expansion, production increases, or modification which will result in new, different, or increased discharges of pollutants regulated by PVSC must be reported by submission of a new Passaic Valley Sewerage Commissioners Sewer Use Application. If such changes will not violate the effluent limitations specified in this permit, then notice only to PVSC of such changes is required. Following such notice the permit may be modified to specify and limit any pollutants not previously limited.

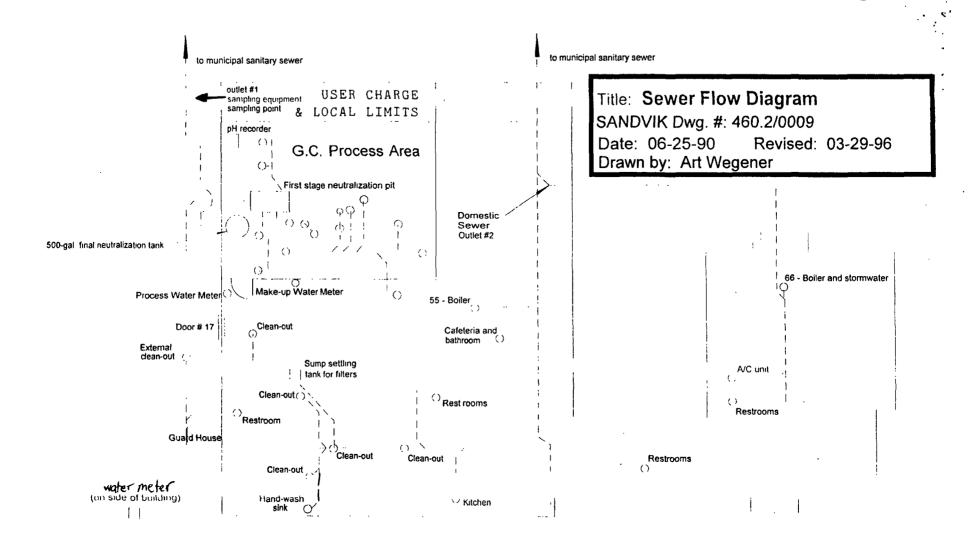


- 5.1 **PERMIT MODIFICATION:** After notice and opportunity for a hearing, this permit may be modified, or revoked in whole or in part during its term for cause including, but not limited to the following:
 - (a) Violating any terms or condition of this permit;
 - (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 5.2 TOXIC POLLUTANTS: Notwithstanding Section A Part 2 of this permit, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition), is established under Section 307(b) of the Federal Water Pollution Control Act, its amendments, or any other subsequent law or regulation for a toxic pollutant which is present in the discharge, and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

- 5.3 CIVIL AND CRIMINAL LIABILITY: A violation of the PVSC Rules and Regulations or a violation of any term or condition contained in this Sewer Use Permit may subject the Permittee to enforcement and civil penalties of up to \$50,000 per day for each violation, and each day's continuance of the violation shall constitute a separate violation. Enforcement may include the institution of a civil action for injunctive relief and/or to recover civil penalties and/or referral to the appropriate agency for criminal enforcement.
- 5.4 <u>STATE LAWS:</u> Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State Law or regulation under authority preserved by Section 510, (33 U.S.C.A. § 1370) of the Federal Water Pollution Control Act as amended.
- 5.5 **PROPERTY RIGHTS:** The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or Regulations.
- 5.6 **SEVERABILITY:** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.



- (a) "Composite" a combination of individual samples obtained at regular intervals over the entire discharge day.
- (b) "Daily" each operating day.
- (c) "Daily Maximum Discharge" the highest discharge by weight or other appropriate units, as specified herein, during any calendar day.
- (d) "Grab" an individual sample collected in less than 15 minutes.
- (e) "Immediate Access" access without delay but in no event beyond 10 minutes from the time the request is made known to the guard or employee.
- (f) "Monthly" one day each month during a normal operating day.
- (g) "Monthly Average Value" the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during the month. Results may be expressed in mass loadings per day or concentration. The monthly average value does not apply to those parameters that are continuously monitored.
- (h) "N/A" not applicable.
- (i) "Quarterly" every three (3) months.
- (j) "Weekly" one day each week during a normal operating day.



Outlet Designation #:

Outlet # 1: 08401681-18055-0081 - 8 inch - Industria

OUTLET #2 08401682-18055-0081-10 inch - Domestic

· is sometimes



Sandvik Coromant Company

1702 Nevins Rd. Fair Lawn, NJ 07410 United States (Map)

Phone: 201-794-5000 Fax: 201-794-5165

http://www.coromant.sandvik.com

Covered by James Bryant

OVERVIEW

Sandvik Coromant Company's tools are run of the mill — that is, they help the mill run. The US arm of a Sandvik subsidiary, Sandvik Coromant US manufactures cutting and machine tools used in milling, turning, and drilling. The tools make use of carbide ceramics, and extremely hard materials like diamond and cubic boron nitride. Sandvik Coromant has customers in the aerospace, automotive, general engineering, and die and mold industries. Its international parent based in Sweden, AB Sandvik Coromant, has operations in some 60 countries worldwide.

KEY INFORMATION

D-U-N-S Number

001479369

Buy a D&B credit report.

Doing Business As Company Type "Sandvik & Coromant"

Private Headquarter

Subsidiary

Ultimate Parent

Sandvik Aktiebolag (Pink Sheets: SDVKY [ADR])

Add Hoover's to

your tool bar!

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Ultimate Parent D-U-N-S

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Immediate Parent

Sandvik Finance B V

Immediate Parent D-U-N-S

411512866

Year Of Founding or Change In Control

1919 DE

State of Incorporation

KEY NUMBERS

Fiscal Year-End 2007 Sales (mil.) December \$895.2 (est.)

2007 Employees

4,000 250

Employees At This Location

KEY PEOPLE

VP, Sales

Alan Godfrey

Media Relations VP, Marketing Hakan Hellstrand Brian Norris

President and CEO

John Israelsson

INDUSTRY INFORMATION

First Research Industry Profiles NEW!

Extensive Industry Intelligence

Machine Tool Manufacture

Hoover's Industries

Industrial Manufacturing

Metal Fabrication (primary)

Primary SIC Code

3541: Machine tools, metal cutting types

Primary NAICS Code

333512: Machine Tool (Metal Cutting Types) Manufacturing

TOP COMPETITORS

Alvord-Pelk

Giddings & Lewis

Harrington Tool

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Sandvik Aktiebolag (Pink Sheets: SDVKY [ADR])

Storgatan 2

SE-811 81 Sandviken, Sweden (Map)

Phone: +46-26-26-00-00

Fax: +46-26-26-10-22

Primary US Address 1702 Nevins Rd.

Fair Lawn, NJ 07410-0428 United States (Map)

Phone: 201-794-5000 Toll Free: 800-726-3845 Fax: 201-794-5165

http://www.sandvik.com Covered by Jeff Dorsch

OVERVIEW

When it comes to machine tools, Sandvik knows the drill. The company makes a wide array of tools for drilling holes in just about anything. Its cemented-carbide cutting tools are used by the automotive, aerospace, and engineering industries to drill, mill, and machine metal, Sandvik also produces mining and construction equipment for drilling, crushing, loading, and transporting rock and ore. Its specialty steel division makes stainless steel and alloy tube, strip, wire, and bar that are used primarily by the engineering and processing industries. Sandvik's operations are represented in more than 130 countries worldwide. The company owns a 96% share of German metal-cutting machinery maker WALTER AG.

KEY INFORMATION

D-U-N-S Number

Buy a D&B credit report.

Company Type

Public - Pink Sheets: SDVKY [ADR]; Stockholm: SAND

Headquarters

Year Of Founding or Change In Control

1897

KEY NUMBERS

Fiscal Year-End 2006 Sales (mil.) 1-Year Sales Growth 2006 Employees 1-Year Employee Growth December \$10,547.0 32.5%

> 41,743 5.4%

KEY PEOPLE

Chairman

Clas Åke Hedström President and CEO Lars Pettersson

EVP, CIO, and Business Development EVP and CFO

SVP, Human Resources

Peter Larson Per Nordberg

Carina Malmgren Heander

INDUSTRY INFORMATION

First Research Industry Profiles NEW!

Extensive Industry Intelligence

Machine Tool Manufacture

Hoover's Industries

Industrial Manufacturing

Industrial Machinery & Equipment Manufacturing (primary)

Metals & Mining

Precious Metals Mining & Processing

Steel Production

Primary SIC Code

3541: Machine tools, metal cutting types

Primary NAICS Code

333512: Machine Tool (Metal Cutting Types) Manufacturing

INDUSTRY WATCH

Morningstar Analyst Scott Burns (5:02)

07/09/07 6:15PM ET - Burns discusses Alcoa's earnings, just out after the bell -- the official kickoff of the earnings season.

TOP COMPETITORS

Atlas Copco Caterpillar Kennametal

RANKINGS/STOCK INDEXES

#437 in FT Global 500

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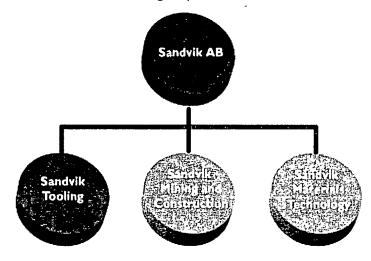
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Corporate Governance

Organization



The Sandvik Group conducts operations within three core areas - Sandvik Tooling, Sandvik Mining and Construction, Sandvik Materials Technology - with responsibility for research and development (R&D), production and sales of their respective products. Seco Tools, an independent, publicly listed company, is also a member of the group.



Business Areas

Sandvik Tooling

Tools and tooling systems for metal cutting, as well as blanks and components in cemented carbide.

Presentation (from The Sandvik World)

Product areas: Sandvik Coromant produces tools made of cemented carbide,

Sandvik Mining and Construction

Develops, manufactures and markets rock-excavation equipment, tools and services for mining and civil engineering.

Presentation (from The Sandvik World)

Products:

Rock Tools and systems. Drill rigs and rock drills.

Sandvik Materials Technology

Products made of stainless and high-alloy steel, special metals and resistance materials as well as process systems.

Presentation (from The Sandvik World)

Product areas:

Tube produces seamless tube and pipe in stainless steel as well ceramics and extremely hard materials such as diamond and cubic boron nitride.

<u>Sandvik Hard Materials</u> produces cemented-carbide tool blanks, engineering components and rolls.

Within this business area there are several other product areas and brands not affiliated with the Sandvik brand.

Load and haul machines.
Continuous-mining and tunneling machines.
Crushers and screens.
Conveyors and conveyor components.
Bulk materials handling equipment.
Breakers and demolition tools.

as in titanium, nickel and zirconium alloys.

Strip produces strip in a wide range of steel grades and sizes for many applications with special strength in thin precision strip steel.

Wire produces wire in an extensive range of stainless steel grades with different mechanical properties to suit a variety of applications.

<u>Kanthal</u> manufactures metallic and ceramic resistance materials in the form of wire, strip and electric heating elements.

<u>Sandvik Process Systems</u> develops, manufactures and markets steel belts and process plants based on steel-belt technology.

Sandvik MedTech is a leading contract manufacturer serving orthopaedic and spine OEMs and offers a complete range of materials for medical and dental applications.

Business Units

Major operating business units.

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Sandvik Coromant Our History

Swedish steel shaped our world

Sandvik was making ingot steel using the Bessemer long before anyone else. A trader named Göran Fredrik Göransson succeeded in producing steel in large quantities to meet growing demand. On the back of this innovation, Sandvik was founded in 1862. Göransson was a pioneer in other areas as well. He was ahead of his time in what's now known as relationship marketing.

increeded in producing steel in the back of this innovation, as a pioneer in other areas as we known as relationship

G F Göransson

A challenging enterprise

From the start, Göransson was on the road himself, looking for customers across the Continent. A giant task at that time! But his business idea was based on direct contact between manufacturer and customer. This style of valuing customer contacts is alive and well in Sandvik Coromant today. We've always continued to develop customer-cooperation.

Innovations continued on the product side. In 1942 a small cemented carbide tools department was started and the Sandvik Coromant brand name was registered. And in 1952, an entire production unit was established in Gimo, central Sweden, now the main plant for tools and carbide inserts.

A world-leading tool supplier

Our desire to keep on developing has made us a world leader in metal cutting tools. Our path — from steel production via the first cemented carbide products to today's sophisticated tools for turning, milling and hole making — is lined with innovations. Innovation has not just been reserved for products and machining methods, but also customer contacts, service and training.



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- The following records were round which man

dvik Coromant US Main Office

o2 Nevins Road P.O. Box 428 Fair Lawn NJ 07410-0428 USA

(201) 794-5000

(201) 794-5165

@ us.coromant@sandvik.com

Tollfree Number: 1-800-SANDVIK Afterhours Phone: 1-800-SANDVIK

Local Internet Site:

http://www.coromant.sandvik.com/us

Sandvik Coromant US

1702 Nevins Road Fair Lawn NJ 07410 USA

(201) 794-5250

(201) 794-5257

@ us.coromant@sandvik.com

Tollfree Number:

00-SANDVIK

cal Internet Site:

http://www.coromant.sandvik.com/us

Sandvik Coromant US

777 Enterprise Drive, Suite 120 Pontiac MI 48341-3166 USA

(248) 338-9655

(248) 338-1027

@ us.coromant@sandvik.com

Tollfree Number:

1-800-SANDVIK

Local Internet Site:

http://www.coromant.sandvik.com/us

Sandvik Coromant Facts in brief



- Sandvik Coromant is the world's leading producer of tools for turning, milling and drilling.
- Sandvik Coromant is represented in 130 countries worldwide.
- Headoffice in Sandviken, Sweden.
- 7 500 employees.
- We have customers throughout the metalworking field including the world's major automotive and aerospace industries, the die and mould industry and general engineering industries.
- In 20 well-equipped Productivity Centers customers learn about tooling solutions for increased productivity.
- We offer various programmes to help you and us recognise what's best in your production - and pinpoint areas that need improvements.
- Our central stocking points in Europe, the United States and the Far East supply our customers directly, within 24 hours.
- We invest at least twice as much in research and development every year than the average company in our business.

© Sandvik Coromant

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Business Information Report

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Print this Report

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ATTN: jbenthin@intell-group.com

Report Printed: AUG 28 2007

In Date

Business Summary

SANDVIK, INC.

(FOREIGN PARENT IS SANDVIK FINANCE BV, SCHIEDAM, NETHERLANDS.) SANDVIK & COROMANT

1702 Nevins Rd Fair Lawn, NJ 07410 Now Included with this Report

D&B's Credit Limit Recommendation

D&B's industry and risk-based limit guidance

: ▶ Learn More

Payment Trends Profile

Payment trends and industry benchmarks

Learn More

is is a **headquarters** (subsidiary) location.

Branch(es) or division(s) exist.

Mailing address: PO Box 428

Fair Lawn,

NJ 07410

Web site:

www.coromant.

sandvik.com

Telephone:

201 794-5000

Fax:

201 794-5165

Manager:

JAMES T BAKER,

PRES

Year started:

1919

Employs:

4,000 (250 here)

History:

CLEAR SIC: 3316

3317 3356

3315 3545

3533

D-U-N-S Number:

00-147-9369

D&B Rating:

Number of employees:

1R3

1R is **10 or more** employees.

Composite credit appraisal:

3 is **fair**.

D&B PAYDEX®:

12-Month D&B PAYDEX: 68

When weighted by dollar amount, payments to suppliers average 17 days beyond terms.

120 days slow 30 days slow Prompt Anticipates

Based on trade collected over last 12 months.

Enhanced payment trends and industry benchmarks are available on

this business

SAN000209

Line of business: Mfg cold-rolled

steel, mfg steel pipe/tubes, nonferrous rollng/drawng

Summary Analysis

D&B Rating:

1R3

Number of employees:

1R indicates **10 or more** employees.

Composite credit appraisal: 3 is fair.

The 1R and 2R ratings categories reflect company size based on the total number of employees for the business. They are assigned to business files that do not contain a current financial statement. In 1R and 2R Ratings, the 2, 3, or 4 creditworthiness indicator is based on analysis by D&B of public filings, trade payments, business age and other important factors. 2 is the highest Composite Credit Appraisal a company not supplying D&B with current financial information can receive. For more information, see the D&B Rating Key.

Below is an overview of the company's rating history since 01/01/91:

| D&B Rating | Date Applied |
|------------|--------------|
| 1R3 | 04/14/04 |
| 1R2 | 04/13/99 |
| | 07/31/93 |
| 5A2 | 01/01/91 |

he Summary Analysis section reflects information in D&B's file as of August 27, 2007.

NEW!

Have SANDVIK, INC.'s payment habits changed over time?

0

A Payment Trends Profile will show you - <u>View Now</u>

Customer Service

If you have questions about this report, please call our Customer Resource Center at 1.800.234.3867 from anywhere within the U.S. If you are outside the U.S. contact your local D&B office.

*** Additional Decision Support Available ***

Additional D&B products, monitoring services and specialized investigations are available to help you evaluate this company or its industry. Call Dun & Bradstreet's Customer Resource Center at 1.800.234.3867 from anywhere within the U.S. or visit our website at www.dnb.com.

History

The following information was reported **07/26/2007**:

Officer(s):

JAMES T BAKER, PRES

DIRECTOR(S):

THE OFFICER(S)

Business started 1919, 100% of capital stock is owned by foreign parent.

SAN000210

JAMES T BAKER born 1945. 1994-present active here. 1989-1994 Vice President and General Manager of Welding and Wire Division. 1983-1989 Vice President-Finance of Sandvik Steel Company. University of Scranton, BS, 1972; —MBA, 1980.

Corporate Family

Click below to buy a Business Information Report on that family member. For an expanded, more current corporate family view, use D&B's Global Family Linkage product.

Buy Selected Report(s)

| Day colocica (reperito) (i.e., | | |
|---|-----------------------|---------------------------|
| Global Ultimate: Sandvik Ab | Sandviken, Sweden | DUNS # <u>35-393-7758</u> |
| Parent: | | |
| Sandvik Finance B.v. | Schiedam, Netherlands | DUNS # 41-151-2866 |
| Subsidiaries (US): | | |
| ☐ Dormer Tools Inc | Hebron, KY | DUNS # 00-592-0202 |
| ☐ Lindstrom Precision Tools Inc | Orange, CA | DUNS # <u>09-838-1650</u> |
| Mrl Industries, Inc. | Sonora, CA | DUNS # <u>02-424-3701</u> |
| Precision Twist Drill Co (del) | Crystal Lake, IL | DUNS # 00-507-6567 |
| Sandvik Hard Materials | West Branch, MI | DUNS # <u>18-205-1982</u> |
| Sandvik MGT LLC | Bristol, VA | DUNS # <u>01-230-9048</u> |
| ☐ Sandvik Mining & Construction USA LLC | Alachua, FL | DUNS # 06-588-4074 |
| Sandvik Process Systems, Inc | Totowa, NJ | DUNS # 05-028-6053 |
| Sandvik Sorting Systems, Inc. | Louisville, KY | DUNS # 00-637-2965 |
| Sandvik Special Metals Corp | Kennewick, WA | DUNS # <u>04-280-0656</u> |
| ☐ Technical Tooling Inc | Minneapolis, MN | DUNS # 11-621-5286 |
| ☐ The Kanthal Corporation | Palm Coast, FL | DUNS # 78-689-1820 |
| ☐ Valenite LLC | Madison Heights, MI | DUNS # <u>00-532-1468</u> |
| Branches (US): | | |
| Sandvik Inc | Palatine, IL | DUNS # 60-943-6811 |
| Sandvik Inc | Erlanger, KY | DUNS # 61-800-5664 |
| Sandvik Inc | Charlotte, NC | DUNS # 19-420-8609 |
| Sandvik Inc | Pittsburgh, PA | DUNS # <u>18-335-8654</u> |
| Sandvik Inc | Pittsburgh, PA | DUNS # <u>18-704-3955</u> |
| Sandvik Inc | Stafford, TX | DUNS # 02-080-3433 |
| Sandvik, Inc | Irvine, CA | DUNS # <u>08-117-3411</u> |
| i de la companya de | | |

| D8 | B Business Information Report: SANDVIK, INC. | | |
|------|---|--|---------------------------|
| | Sandvik, Inc | Hebron, KY | DUNS # <u>14-493-7666</u> |
| | Sandvik, Inc | Benton Harbor, MI | DUNS # 11-530-0154 |
| | Sandvik, Inc | Pontiac, MI | DUNS # <u>05-204-3981</u> |
| | Sandvik, Inc | Mebane, NC | DUNS # <u>09-923-4577</u> |
| | Sandvik, Inc | Brier Hill, PA | DUNS # 12-504-4045 |
| | Sandvik, Inc | Clarks Summit, PA | DUNS # <u>03-143-7668</u> |
| | Sandvik, Inc | Stafford, TX | DUNS # <u>96-648-0691</u> |
| Affi | liates (International):(Affiliated companie | es share the same parent company as | this business.) |
| | AB Hedgrind | Sandviken, SWEDEN | DUNS # <u>35-548-1581</u> |
| | AB SANDVIK Formsprutning | Sandviken, SWEDEN | DUNS # <u>35-623-6901</u> |
| | ALPHA RE SA | LUXEMBOURG, LUXEMBOURG | DUNS # 40-072-4662 |
| | CTT Cutting Tool Technology B.V. | Schiedam, NETHERLANDS | DUNS # 40-221-0801 |
| | DORMER ITALIA SPA | Milano, ITALY | DUNS # <u>42-861-0778</u> |
| | Sandvik A/S | BRONDBY, DENMARK | DUNS # 30-512-7276 |
| | SANDVIK ARGENTINA S.A. | SAN JUSTO, ARGENTINA | DUNS # <u>97-169-1712</u> |
| | SANDVIK AUSTRALIA PTY LTD | SMITHFIELD, AUSTRALIA | DUNS # <u>75-047-3670</u> |
| | Sandvik Benelux B.V. | Schiedam, NETHERLANDS | DUNS # 40-219-0615 |
| | SANDVIK ESPANOLA SA | MARTORELLES, SPAIN | DUNS # 46-201-0786 |
| | Sandvik Holding GmbH | DÜSSELDORF, GERMANY | DUNS # 34-187-9948 |
| | SANDVIK HOLDINGS LTD | Halesowen, UK (ENGLAND, SCOTLAND, WALES, N.IRELAND) | DUNS # <u>57-055-8700</u> |
| | Sandvik in Austria Gesellschaft m.b.H. | WIEN, AUSTRIA | DUNS # 30-015-4184 |
| | SANDVIK Invest AB | Sandviken, SWEDEN | DUNS # <u>35-396-4356</u> |
| | Sandvik Mining and Construction G.m.b.H. | ZELTWEG, AUSTRIA | DUNS # 30-121-4656 |
| | SANDVIK MINING AND CONSTRUCTION S. E.A. PTE LTD | SINGAPORE, SINGAPORE | DUNS # 62-853-4950 |
| | SANDVIK NEW ZEALAND LIMITED | AUCKLAND, NEW ZEALAND | DUNS # <u>76-002-5072</u> |
| | SANDVIK Norge AS | Bærum Postterminal, NORWAY | DUNS # 51-501-4645 |
| | SANDVIK Pt AB | Sandviken, SWEDEN | DUNS # <u>35-486-4977</u> |
| | SANDVIK SOUTH EAST ASIA PTE LTD | SINGAPORE, SINGAPORE | DUNS # 59-513-2408 |
| | Sandvik Suhjun Ltd. | SEOUL, KOREA, REPUBLIC OF | DUNS # <u>68-790-1397</u> |
| | SANDVIK TAMROCK (FAR EAST) LIMITED | TSIM SHA TSUI, HONG KONG | DUNS # <u>68-624-8451</u> |
| | Sandvik Tamrock (Far East) Limited | TUEN MUN, HONG KONG | DUNS # 66-202-8349 |
| | SANDVIK TAMROCK SERVICIOS S.A. | SAN JUSTO, ARGENTINA | DUNS # 97-537-9368 |

Buy Selected Report(s)

Business Registration

☐ Setp Invest AB

DUNS # 50-861-8704

Sandviken, SWEDEN

CORPORATE AND BUSINESS REGISTRATIONS PROVIDED BY MANAGEMENT OR OTHER SOURCE

The Corporate Details provided below may have been submitted by the management of the subject business and may t have been verified with the government agency which records such data.

Registered Name:

Sandvik Inc.

Business type:

CORPORATION

Corporation type:

PROFIT

Date incorporated:

FEB 28 1963

State of incorporation: DELAWARE

Where filed:

SECRETARY OF STATE, DOVER, DE

Operations

07/26/2007

Description:

Foreign parent is Sandvik Finance BV, Schiedam, Netherlands, Foreign parent Duns number is 41-151-2866. Parent company owns 100% of capital stock and which no financial information is available. Sandvik Finance BV, in turn, is a wholly-owned subsidiary of Sandvik Aktielbolag. Intercompany relations: Parent makes advances, both short and long-term.

Common stock

Par value:

Authorized shares:

1,000,000

\$25.0000

Sandvik Aktiebolag, Sandviken, Sweden, started 1862, operates as a manufacturer of cementedcarbide products, among them tools for metalworking and rockdrilling, tubes, strip and wire made of stainless and high-alloy special steels, saws and other tools, and conveyor and process systems. Sandvik Aktiebolag has over 80 other subsidiaries.

Manufactures cold-rolled steel sheet, strip and bars, specializing in steel strip and strip flat wire. Manufactures steel pipe and tubes, specializing in seamless tubes. Manufactures nonferrous rolled, drawn and extruded nonferrous metals, specializing in zirconium or zirconium alloy and titanium or titanium alloy. Manufactures steel wire and fabricated wire products, specializing in ferrous or iron wire products. Manufactures cutting tools, machine tool accessories and measuring devices. Manufactures oil and gas machinery and equipment, specializing in field tool rock bits and drilling tools for gas, oil or water wells.

Terms are net 30 days and letters of credit. Has 5,000 account(s). Sells to automotive, aerospace, machine tool building, oil drilling, mining, construction, energy and nuclear industries. Territory: Worldwide.

Nonseasonal. Competition heavy. Some or all of the operations at this location have been registered to the international quality system standard -- ISO 9001.

Employees:

4,000 which includes officer(s). 250 employed here.

Facilities:

Owns 168,000 sq. ft. in a two story brick building.

Location:

Industrial section on main street.

Branches:

This business has multiple branches, detailed branch/division information is available in Dun &

Bradstreets linkage or family tree products.

Subsidiaries: At Feb 2 2001 the company had numerous subsidiaries that operated the consolidated business of

the parent.

SIC & NAICS

SIC:

Pased on information in our file, D&B has assigned this impany an extended 8-digit SIC. D&B's use of 8-digit SICs enables us to be more specific to a company's operations than if we use the standard 4-digit code.

The 4-digit SIC numbers link to the description on the Occupational Safety & Health Administration (OSHA) Web site. Links open in a new browser window.

33160101Strip, steel, cold-rolled, nec: from purchased hot-rolled,

33160104Wire, flat, cold-rolled strip: not made in hotrolled mills

33170102Tubes, seamless steel

33560702Zirconium and zirconium alloy: rolling, drawing,or extruding

33560602Titanium and titanium alloy: rolling, drawing, or extruding

33150307 Wire products, ferrous/iron: made in wiredrawing plants

35450000 Machine tool accessories

35330101Bits, oil and gas field tools: rock

35330103 Drilling tools for gas, oil, or water wells

35330103 Drilling tools for gas, oil, or water wells

NAICS:

| 331221 | Rolled Steel Shape Manufacturing |
|--------|---|
| 331221 | Rolled Steel Shape Manufacturing |
| 331210 | Iron and Steel Pipes and Tubes Manufacturing from Purchased Steel |
| 331491 | Nonferrous Metal (except Copper and Aluminum) Rolling. Drawing, and Extruding |
| 331491 | Nonferrous Metal (except Copper and Aluminum) Rolling. Drawing, and Extruding |
| 331222 | Steel Wire Drawing |
| 333515 | Cutting Tool and Machine Tool Accessory Manufacturing |
| 333132 | Oil and Gas Field Machinery and Equipment Manufacturing |
| 333132 | Oil and Gas Field Machinery and Equipment Manufacturing |
| 333132 | Oil and Gas Field Machinery and Equipment Manufacturing |

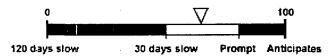
D&B PAYDEX

Enhanced payment trends and industry benchmarks are available on this business

The D&B PAYDEX is a unique, dollar weighted indicator of payment performance based on up to 330 payment experiences as reported to D&B by trade references.

3-Month D&B PAYDEX: **65**

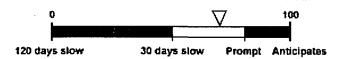
When weighted by dollar amount, payments to suppliers average 19 days beyond terms.



Based on trade collected over last 3 months.

12-Month D&B PAYDEX: **68**

When weighted by dollar amount, payments to suppliers average 17 days beyond terms.



Based on trade collected over last 12 months.

When dollar amounts are not considered, then approximately 78% of the company's payments are within terms.

Payment Summary

The Payment Summary section reflects payment information in D&B's file as of the date of this report.

Below is an overview of the company's dollar-weighted payments, segmented by its suppliers' primary industries:

| | Total Rcv'd (#) | Total Dollar Amts (\$) | Largest High Credit (\$) | Within Terms (%) | <31 3 | Days S 31-60 6 (%) | 1-90 90 |)> |
|-------------------------|-----------------------|------------------------------|--------------------------------|------------------------|-------|--------------------------|-------------|----|
| Top industries: | | | | | | | | |
| Trucking non-local | 41 | 300,400 | 40,000 | 62 | 36 | - ' | 2 ., | - |
| Whol industrial suppl | 22 | 224,150 | 60,000 | 57 | 28 | 15 | - | - |
| Nonclassified | · 22 | 195,550 | 50,000 | 76 | 23 | 1 | - | - |
| Whol electrical equip | 8 | 73,300 | 40,000 | 21 | 79 | - | - | - |
| Whol computers/softwr | 7 | 318,000 | 200,000 | 51 | 49 · | - ' | - | - |
| Whol metal | . 7 | 165,850 | 100,000 | 52 | 48 | - • | - | - |
| Executive office | . 6 | 300,050 | 200,000 | 100 | - | - : | - | - |
| Electric services | 6 | 135,100 | 100,000 | 100 | | - | - | - |
| Mfg welding apparatus | 1 | 500,000 | 500,000 | - [| 100 | - ! | - | - |
| Mfg cold rolled steel | 1 | 85,000 | 85,000 | _ ! | 100 | - 1 | - ' | - |
| OTHER INDUSTRIES | 201 | 762,050 | 50,000 | 66 | 27 | 6 ; | 1 | - |
| Other payment categorie | s: | | • | r | | • | | |
| Cash experiences | . 3 | 3,000 | 2,500 | | | | | |
| Payment record unknown | 5 | 23,600 | 15,000 | | | | | |
| Unfavorable comments | . 0 | 0 | 0 | | | | | |
| Placed for collections: | | | | | | | • | |
| With D&B | 0 | 0 | | | | | | |
| ther | · 0 | N/A | | | | | | |
| Total in D&B's file | . 330 | 3,086,050 | 500,000 | | | THE REPORT | | |

The highest **Now Owes** on file is \$400,000

The highest Past Due on file is \$400,000

Dun & Bradstreet has 330 payment experiences in its file for this company. For your convenience, we have displayed 80 representative experiences in the PAYMENTS section.

MEW! How does SANDVIK, INC.'s payment record compare to its industry?

,C

A Payment Trends Profile will show you - View Now

Payment Details

Detailed Payment History

| Da | te Reported (mm/yy) | Paying Record | High Credit (\$) | Now Owes (\$) | Past Due (\$) | Selling Terms | Last Sale Within (months) |
|----|------------------------|---------------|---------------------|------------------|------------------|--|---------------------------------|
| | 08/07 | Ppt | | 500 | 0 ; | THE REAL PROPERTY OF SPECIAL SERVICES AND A SERVICE OF THE SERVICES AND ASSESSMENT OF THE SER | 1 mo |
| | | Ppt | 20,000 | 0 | . O , | | 1 mo |
| _ | | Ppt | 15,000 | 2,500 | 0 | | 1 mo |

07/07

| Ppt | 5,000 | 0 | 0 | | 4-5 mos |
|------------------|--------|--|--|-----|----------|
| Ppt | 5,000 | 5,000 | 0 | | 1 mo |
| Ppt | 2,500 | 0 | | | 2-3 mos |
| Ppt | 1,000 | 0 ! | | | 2-3 mos |
| Ppt | 1,000 | 0 | | | 2-3 mos |
| Ppt | 1,000 | 750 | ; | | |
| Ppt | 500 | 0 | 0 | N30 | 2-3 mos |
| Ppt | 50 | 0 | 0 | | 2-3 mos |
| Ppt | 50 | 0 | 0 ; | | 1 mo |
| Ppt-Slow 30 | 40,000 | 35,000 | 10,000 | N30 | 1 mo |
| Ppt-Slow 30 | 20,000 | 20,000 | 10,000 | N30 | 1 mo |
| Ppt-Slow 30 | 10,000 | 0 | 0 | | 6-12 mos |
| Ppt-Slow 30 | 1,000 | 50 | 0 | | 1 mo |
| Ppt-Slow 30 | 1,000 | 0 | 0 | | . 1 mo |
| Ppt-Slow 30 | 250 ; | 100 | 50 | N30 | 1 mo |
| Ppt-Slow 30 | 100 | 100 | 0 | | 1 mo |
| Slow 10 | 5,000 | all and a second a | and the same of th | | : |
| Slow 30 | 250 | 250 | 0 | | ' 1 mo |
| Disc | 15,000 | 15,000 | 0 ‡ | | 1 mo |
| Disc | 2,500 | 2,500 | 0 | | 1 mo |
| Disc-Ppt | 35,000 | 35,000 | o [!] | | 1 mo |
| Disc-Ppt | 2,500 | 2,500 | 0 | | 1 mo |
| Ppt | 50,000 | 40,000 | 0 ; | | 1 mo |
| Ppt: | 25,000 | 0 | 0 : | | 1 mo |
| Ppt _. | 15,000 | 10,000 | 0 | | 1 mo |
| Ppt · | 15,000 | 15,000 | 0 ; | | 1 mo |
| Ppt | 5,000 | 0 [| 0 | • | 2-3 mos |
| Ppt | 5,000 | 500 | 0 | | 1 mo |
| Ppt _. | 5,000 | 0 | 0 | | 2-3 mos |
| Ppt | 5,000 | 1,000 | 250 | N15 | 1 mo |
| Ppt | 2,500 | 500 | 0 ; | | 1 mo |
| Ppt. | 2,500 | 750 | 0 | | 1 mo |
| Ppt | 2,500 | 0 · | 0 : | | 1 mo |
| Ppt | 2,500 | 0 | 0 ! | | 2-3 mos |
| Ppt [.] | 2,500 | 0 . | 0 | N30 | 2-3 mos |
| Ppt . | 2,500 | 0 | 0 | N15 | 6-12 mos |
| Ppt | 1,000 | 500 | 0 | | 1 mo |
| Ppt | 1,000 | 0 | 0 | | 2-3 mos |
| Ppt: | 750 | 0 . | 0 | | 6-12 mos |
| Ppt, | 750 | 750 | 0 | | _ 1 mo |
| Ppt | 500 | 0 | 0 | | 2-3 mos |
| Ppt | 500 | 0 . | 0 | | 2-3 mos |
| Ppt | 500 | 0 } | 0 | | 2-3 mos |
| Ppt | 500 | 50 | 0 | | 1 mo |
| Ppt | 500 | 0 ; | 0 ¦ | N30 | 2-3 mos |

| 250 | 0 | 0 | | 6-12 mos |
|---------|---|--|---|---|
| 250 | 0 : | 0 | | 1 mo |
| 100 | 0 | 0 | N30 | 6-12 mos |
| 100 | 0 | 0 | | 4-5 mos |
| 100 | 0 | 0 | 1/2 10 N30 | 4-5 mos |
| 100 | 0 | 0 | | 1 mo |
| 50 | 50 | 0 | | 1 mo |
| 0 | 0 | 0 | | 1 mo |
| 50,000 | 15,000 | , 0 | | 1 mo |
| 100,000 | 90,000 | 2,500 | 1/2 10 N30 | 1 mo |
| 5,000 | 750 | 750 | | 1 mo |
| 5,000 | 5,000 | 1,000 | | 1 mo |
| 5,000 | 0 | 0. | Regular terms | 2-3 mos |
| 2,500 | 2,500 | 2,500 | | 1 mo |
| 1,000 | 0 ; | 0 | | 6-12 mos |
| 750 | 0 | 0 | | 6-12 mos |
| 250 | 250 ່ | 250 | | 1 mo |
| 100 | 0 ; | 0 | N15 | 2-3 mos |
| 100 | ο , | 0 | | 1 mo |
| 100 | 100 | 100 | | 4-5 mos |
| 2,500 | 2,500 | 0 | | |
| 2,500 | 1,000 | 1,000 | | 1 mo |
| 20,000 | 0 ; | 0 | | 6-12 mos |
| 2,500 | 0 | 0 | N30 | 2-3 mos |
| 750 | 0 ; | 0 | | 2-3 mos |
| 750 | 0 | 0 : | N15 | 2-3 mos |
| 750 | 100 | 0 | | 1 mo |
| 500 | 0 | 0 | | 6-12 mos |
| 25,000 | 15,000 | 15,000 | N30 | 1 mo |
| 250 | 0 | 0 . | N30 | 6-12 mos |
| 250 | 0 | 0 ; | | 2-3 mos |
| 1,000 | 250 | 250 | | 2-3 mos |
| | 250 100 100 100 100 50 0 50,000 100,000 5,000 5,000 2,500 1,000 750 250 100 100 2,500 2,500 2,500 2,500 750 750 750 750 750 750 750 750 750 | 250 0 100 0 100 0 100 0 100 0 100 0 50 50 0 0 50,000 15,000 100,000 90,000 5,000 750 5,000 5,000 5,000 0 2,500 2,500 1,000 0 250 250 100 0 100 100 2,500 2,500 2,500 2,500 2,500 1,000 2,500 2,500 2,500 1,000 2,500 0 750 0 | 250 0 0 100 0 0 100 0 0 100 0 0 100 0 0 50 50 0 0 0 0 50,000 15,000 0 5,000 5,000 1,000 5,000 5,000 1,000 5,000 5,000 1,000 5,000 2,500 2,500 1,000 0 0 250 250 250 100 0 0 100 100 100 2,500 2,500 0 2,500 2,500 0 2,500 1,000 1,000 2,500 0 0 750 0 0 750 0 0 750 0 0 750 0 0 750 0 0 750 0 0 750 0 0 | 250 0 0 0 N30 100 0 0 1/2 10 N30 100 0 0 0 0 50 50 0 0 0 0 0 0 100,000 90,000 2,500 1/2 10 N30 5,000 750 750 5,000 5,000 1,000 5,000 0 0 Regular terms 2,500 2,500 2,500 1,000 0 0 Regular terms 2,500 2,500 2,500 1,000 0 0 N15 100 0 0 0 N15 100 0 0 0 N15 100 0 0 0 N15 100 100 100 2,500 2,500 0 0 2,500 1,000 1,000 20,000 0 0 N30 750 0 0 N30 750 0 0 N15 750 100 0 N15 750 100 0 N15 750 100 0 N15 750 0 0 N15 750 100 0 N30 25,000 15,000 15,000 N30 250 0 0 N30 |

Payment experiences reflect how bills are met in relation to the terms granted. In some instances payment beyond terms can be the result of disputes over merchandise, skipped invoices etc.

Each experience shown is from a separate supplier. Updated trade experiences replace those previously reported.

NEW! Have SANDVIK, INC.'s payment habits changed over time?

A Payment Trends Profile will show you - View Now

Finance

7/26/2007

On JUL 26 2007 Joann Mitchell, Corp Sec, deferred all information.

Public Filings

The following Public Filing data is for information purposes only and is not the official record. Certified copies can only be obtained from the official source.

Suits

Status: Pending CASE NO.: 520010

Plaintiff: VERDON J BALFANTZ

Defendant: SANDVIK INC AND OTHERS

Where filed: EAST BATON ROUGE PARISH DISTRICT COURT 19TH DISTRICT COURT, BATON

ROUGE, LA

 Date status attained:
 05/11/2004

 Date filed:
 05/11/2004

 Latest Info Received:
 06/25/2004

If it is indicated that there are defendants other than the report subject, the lawsuit may be an action to clear title to property and does not necessarily imply a claim for money against the subject.

Liens

lienholder can file the same lien in more than one filing location. The appearance of multiple liens filed by the same enholder against a debtor may be indicative of such an occurrence.

 Amount:
 \$591

 Status:
 Open

 DOCKET NO.:
 056404744

 Type:
 State Tax

Filed by: WORKFORCE SVC Against: SANDVIK INC

Where filed: UTAH COUNTY 4TH DISTRICT COURT, PROVO, UT

 Date status attained:
 09/06/2005

 Date filed:
 09/06/2005

 Latest Info Received:
 11/03/2005

UCC Filings

Collateral: All Assets including proceeds and products - All Inventory including proceeds and

products - All Account(s) including proceeds and products - All Fixtures including

proceeds and products - and OTHERS

Type: Original

Sec. party: PNC BANK NATIONAL ASSOCIATION, PHILADELPHIA, PA

Debtor: MADISSON CORPORATION THE, SWISSVALE, PA

Filing number: 36450848

Filed with: SECRETARY OF STATE/UCC DIVISION, HARRISBURG, PA

te filed: 07/16/2002 Latest Info Received: 09/19/2002

SAN000218

Collateral: Negotiable instruments and proceeds - Equipment and proceeds

Type: Original

lec. party: XPEDX, AN INTERNATIONAL PAPER COMPANY, CINCINNATI, OH

ebtor: SANDVIK, INC., HEBRON, KY

Filing number: 4044310 3

Filed with: SECRETARY OF STATE/UCC DIVISION, DOVER, DE

Date filed: 01/28/2004 **Latest Info Received:** 03/27/2006

Collateral: Leased Assets and proceeds - Leased Computer equipment and proceeds - Leased

Fixtures and proceeds - Leased Equipment and proceeds

Type: Original

Sec. party: WINTHROP RESOURCES CORPORATION, MINNETONKA, MN

Debtor: SANDVIK, INC. Filing number: 10590467

Filed with: SECRETARY OF STATE/UCC DIVISION, DOVER, DE

Date filed: 08/03/2001 **Latest Info Received:** 04/15/2002

Coliateral: Equipment and proceeds

Type: Original

Sec. party: U.S. BANCORP EQUIPMENT FINANCE, INC. - MACHINE TOOL FINANCE GROUP,

PORTLAND, OR SANDVIK, INC.

Debtor: SANDVIK, I Filing number: 5289335 3

Filed with: SECRETARY OF STATE/UCC DIVISION, DOVER, DE

Pate filed: 09/19/2005 atest Info Received: 10/14/2005

Collateral: Equipment and proceeds

Type: Original

Sec. party: THE CIT GROUP/EQUIPMENT FINANCING, INC., TEMPE, AZ

Debtor: SANDVIK, INC. Filing number: 4139370 3

Filed with: SECRETARY OF STATE/UCC DIVISION, DOVER, DE

Date filed: 05/19/2004 **Latest Info Received:** 06/09/2004

Collateral: Equipment Type: Original

Sec. party:J & H MACHINE TOOLS, INC., CHARLOTTE, NCDebtor:SANDVIK COROMANT COMPANY, MEBANE, NC

Filing number: 20040003335A

Filed with: SECRETARY OF STATE/UCC DIVISION, RALEIGH, NC

Date filed: 01/12/2004 **Latest Info Received:** 02/19/2004

Collateral: Equipment Type: Original

Sec. party: CAMPBELL INDUSTRIAL SALES INC, HOUSTON, TX

Debtor: SANDVIK, INC., STAFFORD, TX

ling number: 030028507217

SECRETARY OF STATE/UCC DIVISION, AUSTIN, TX

SAN000219

D&B Business Information Report: SANDVIK, INC.

 Date filed:
 05/21/2003

 Latest Info Received:
 06/02/2003

Ollateral: Leased Computer equipment

pe: Original

Sec. party: WINTHROP RESOURCES CORPORATION, MINNETONKA, MN

Debtor: SANDVIK, INC. Filing number: 2163643 4

Filed with: SECRETARY OF STATE/UCC DIVISION, DOVER, DE

Date filed: 06/03/2002 **Latest Info Received:** 08/22/2002

Collateral: Computer equipment - Equipment

Type: Amendment

Sec. party: WINTHROP RESOURCES CORPORATION, MINNETONKA, MN

Debtor: SANDVIK, INC. Filing number: 2221521 2

Filed with: SECRETARY OF STATE/UCC DIVISION, DOVER, DE

 Date filed:
 08/26/2002

 Latest Info Received:
 09/23/2004

 Original UCC filed date:
 06/03/2002

 Original filing no.:
 2163643 4

Collateral: Leased Equipment including proceeds and products

Type: Original

Sec. party: IOS CAPITAL, MACON, GA
Debtor: SANDVIK COROMANT INC

Filing number: 2007 1790228

led with: SECRETARY OF STATE/UCC DIVISION, DOVER, DE

Date filed: 05/11/2007 **Latest Info Received:** 06/13/2007

Collateral: Leased Business machinery/equipment including proceeds and products

Type: Original

Sec. party:IOS CAPITAL, MACON, GADebtor:SANDVIK COROMANT INC

Filing number: 6174819 3

Filed with: SECRETARY OF STATE/UCC DIVISION, DOVER, DE

Date filed: 05/24/2006 **Latest Info Received:** 06/29/2006

There are additional UCC's in D&B's file on this company available by contacting 1-800-234-3867.

The public record items contained in this report may have been paid, terminated, vacated or released prior to the date this report was printed.

Government Activity

Activity summary

Borrower (Dir/Guar):

Administrative debt:

Contractor:

NO
Grantee:

NO
Party excluded from federal program(s):

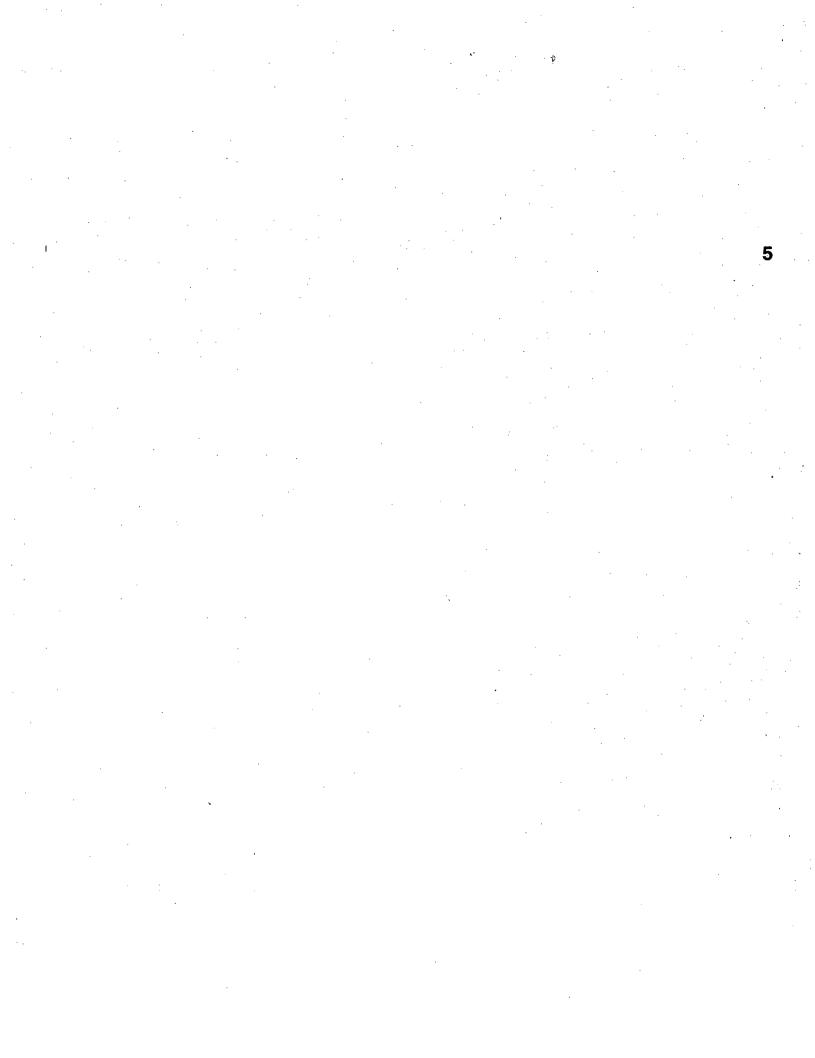
NO

| Possible of | candidate: | for socio | -economic | program | consideration |
|-------------|------------|-----------|-----------|---------|---------------|
|-------------|------------|-----------|-----------|---------|---------------|

| Labor surplus area: | | YES (2007) |
|---------------------|--|------------|
| Small Business: | | N/A |
| 8(A) firm: | | N/A |

The details provided in the Government Activity section are as reported to Dun & Bradstreet by the federal government and other sources.

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HEAVY METALS SOURCE DETERMINATION STUDY

IN COMPLIANCE WITH OCEAN DUMPING PERMIT NO. II NJOO3 INTERIM, SECTION 9(c)

Passaic Valley Sewerage Commissioners

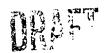
JOSEPH M. KEEGAN - Chairman
BEN W. GORDON - Vice Chairman
THOMAS J. CIFELLI - Commissioner
VINCENT CORRADO - Commissioner
ROBERT J. DAVENPORT - Commissioner

RICHARD M. GIACOMARRO - Commissioner CHARLES A. LAGOS - Commissioner

CARMINE T. PERRAPATO - Executive Director
ROCCO D. RICCI - Chief Engineer

PHASE II

APRIL 1980



Elson T. Killam Associates, Inc.



KLL013775

PASSAIC VALLEY SEWERAGE COMMISSION - HEAVY METAL SOURCE DETERMINATION INDUSTRIAL MASTER LIST

PAGE 1

| 5 | CLARA MASS HOSPITAL | 1 FRANKLIN AVE. | BELLEVILLE | 67109 3 8 0 0 0 200 000 |
|------------|--|--|-----------------|--|
| 10 | CONSOLIDATED BASES I.C. | 120 GREYLOCK AVE. | BELLEVILLE | 07109 4 1 2 1 1 141 181 |
| 20 | ETAMCO INDUSTRIES | 1 MONTGOMERY ST. | BELLEVILLE | U7109 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| 25 | INFAL PLATING & POLISHING | nel Main St. | PELLEVILLE | C7109 4 1 1 1 1 741 281 |
| 3.0 | HALTER KINDS & CO. INC. | 675 MAIN ST. | RELIEVILLE | 67109 4 1 1 2 1 141 281 |
| 30 | MACHAN COLOA | 71 BELMOUT AVE | HELLEVILLE | 07109 3 8 1 1 1 141 281 |
| 50 | MILLLE & CON | 24 SCHEVILLE AVE. | BELLEVILLE | 07109 4 1 1 4 1 1A1 2B1 |
| 5 U | MODERN VITAL INCHESTALES | 112 GREVIECK AVE. | BELLEVILE | |
| 22 | B N C. INC | AND CATH CAT | BELLEVILLE | 07109 4 1 1 1 1 241 281 |
| 70 | DED CIAL VERCI | 0/1 1-14 3/1 | DELLEVILLE | 07109 4 1 1 1 1 141 211 |
| 71 | CONSOLIDATED BASES INC. ETAMCO INDUSTRISS IDEAL PLATING & POLISHIM WALTER KIDDE & CO. INC. MCGRAW EDISON MILLER & SON MODERN ELTAL INDUSTRIES P. N. C. INC. RED STAM YEAST ROCHE LIAGNOSTICS WALLACE & TICRN-N GORFOS CORP. MARCAL FAPER MILLS INC. SCHERING CORP. | TI CHANNETT AVE | BELLEVILLE | C7109 5 6 1 1 1 1A1 161 |
| 75 | WOUND DISCHOOLING | TE MAIN CT | BELLEVILLE | 07109 3 5 1 1 1 241 261 |
| 8.0 | WALLACE STICK TON | 2" TAIN 31. | BELLEVILLE | 0710 % % 1 1 2 1 141 201 |
| 99 | COMING CORP. | 271 GLENWOOD AVE. | RLOOMFILLD | 070c. 2 1 2 1 1 1A1 251 |
| 100 | MARCAL FAFER MILLS INC. | 43C HOUVER AVE. | BLOCMFIELD | 07001 5 6 1 2 1 141 281 |
| 119 | SCHERING CORF. | 6: Shange St. | BLOOMFILLU | 67363 3 8 2 2 1 141 281 |
| 120 | WESTIF GHOUSE FLECTHIC CORF. | 1 WESTINGHOUSE PLATA | SLOOMF [ELD | 07003 3 1 1 2 1 141 261 |
| 130 | LIRCHAFT ENGINEERING PRODUCTS INC. | 2 -CHERMAN AVE. | CLIFTON | 07014 6 1 1 1 1 1 1 1 281 |
| 140 | ATLANTIC CASTING & ENGINEERING CORP. | "' ALGOMETELD AVE. | CLIFION | 07014 6 1 1 1 1 1 1 1 261 |
| 150 | BRIGHT STAR INCUSTRIES INC. | 600 GETTY AVE. | CLIFION | 07014 6 8 1 1 1 141 281 |
| | COSAN CHEMICAL CORP. | 441 PIVER RD. | CLIFTON | 07014 6 3 1 1 2 1A1 000 |
| 170 | EDMAR CREATIONS | 35 MONHEGAN ST. | CLIFIO!. | 07014 6 1 1 1 1 1A1 2B1 |
| 9 P I | FRITZCHE DUDGE & OLCOTT 1".C. | re third st. | CLIFIUN | 07014 6 8 1 1 1 1 1 1 1 1 1 1 1 1 |
| 200 | GIVAUDA* CORP. | 125 BELAWARNA AVE. | CLIFTON | 07014 4 8 1 4 1 141 251 |
| 210 | A. HELLER HEAT TREATING CC. | 5 SELLINGTON ST. | CLIFION | 07014 6 1 1 1 1 141 201 |
| 220 | INMONT CORP. | 1255 SEDAD ST. | CLIFTON | 07014 6 8 1 1 1 1 1 1 1 1 1 1 1 |
| 250 | MAJOR POOL EQUIFMENT COSE. | 26 3 E1 TIN RD. | CLIFION | 07014 6 1 2 1 1 141 281 |
| 260 | MICHOTRONICS COR! . | 156 HURON AVE. | CLIFION | 57014 6 1 1 1 1 121 261 |
| 270 | MISSIPPINER PRINTS INC. | 211 FOUNT PROSPECT AVE. | CLIFTON | 07014 6 4 2 2 1 1A1 2b1 |
| 275 | MULTI COLOR LITHOGRAPHERS 150. | 9 GRIGHTON RD. | CLIFTC". | 07014 6 8 2 1 2 141 000 |
| 281 | NATIONAL STANDARD CO. | 715 CLIFTON AVE. | CLIFION | 07014 6 1 1 1 1 1 141 281 |
| | PACKAGE HOUSE INC. | 140 SETTY AVE. | CLIFTON | C7014 6 5 1 1 1 1 1 1 2 2 1 |
| 300 | PACKAGING CORP. OF AMERICA | 227 CLIFTON BLVC. | CLIFTON: | 07014 6 6 1 1 2 141 000 |
| 310 | PACKAGING CORP. DE AMERICA PODELL INDUSTRIES INC. | * ENTIN HO. | CLIFTON | 07014 6 3 1 1 2 141 200 |
| | ROUTE 17 PLATING INC. | 112 FIVER RO. | CLIFTON | 07014 4 1 1 2 1 141 281 |
| | SEAL TROUTES INC. | 321 COLFAX AVE. | CLIFTO'. | 07014 6 1 1 1 1 1 1 1 261 |
| 34.1 | STANDARD PACKAGING CORF. | 1 1 152 CN 57. | CLIFTON | 07014 6 5 1 1 2 141 000 |
| 345 | SWEECO TUBE COPE. | 1 CLIETON BLVD. | CLIFION | 07014 6 1 1 1 1 1 1 1 2 2 1 |
| 350 | UNION PHOTO CO. | 1246 PAIN ST. | CLIFION | 07014 5 8 1 1 1 141 201 |
| 380 | HANGVIA LIGHTE GOLD | 1 WEST CENTRAL AVE. | EAST NEWARK | 07029 2 8 1 1 1 241 211 |
| 150 | CHARLES RESSELER CO. | DIS SOUTH ISTH ST. | EAST ORANGE | 07016 0 1 1 2 1 1/1 2/1 |
| 401 | ROYCE CHEMICAL | 17 CALLTON AVE. | EAST RUTHERFORD | 07073 7 3 1 2 1 141 211 |
| 410 | HAY SCOTT OPERATIONS | SS MALKET ST. | ELMHOOD PARK | 07407 7 5 2 1 1 141 261 |
| 420 | MARCAL PAPER MILLS INC. | 1 VARLET ST. | ELMWGOD PARK | 07407 8 6 1 1 1 141 181 |
| 4.30 | PRESTO LOCK CO. INC. | 35 MARKET ST. | ELMEDOD PARK | 07407 7 1 1 1 1 1 1 1 1 1 1 1 1 |
| 440 | ACE PHOTO ENGRAVING COMP. | 17-50 BIVER RD. | FAIRLALI | 07410 8 8 1 1 2 141 000 |
| 0 450 | FASTMAN KODAK CO. | 16-41 STATE HZY. COR | FAIRL Auto | 07410 8 8 1 1 1 121 1E1 |
| 0 46 | FREE ENCOURTS TAC. | 17-11 STATE HEY. 200 | FAIRLAUN | 07410 8 8 1 1 1 141 201 |
| E 45: | SEALTFONICS INC. STANDARD PACKAGING CORF. SWEFCO TUBE COPF. UNION PHOTO CO. HANGVIA LIGUID GOLD CHARLES RESSFLCH CO. ROYTE CHEMICAL JAY SCOTT OPERATIONS MARCAL PAPER MILLS INC. PPESTO LOCK CO. INC. ACE PHOTO ENGRAVING CORP. EASTMAN KODAK CG. EKCG FREGUETS INC. FISHER SCIENTIFIC CO. | 1 DEAFENT LAKE | FAISI Auto | 07410 8 8 1 1 1 141 261 |
| E in | INTR/COLUR CO. | TITE HUY. 208 | FATRLACK | 07410 8 2 1 1 2 141 060 |
| 1 46 | RAINGOW DYEING & FILISHILG | 24-21 4466644 40- | FATRLES | 07410 R 4 1 1 1 241 201 |
| | RENCO FIRISHING COR- | DO DE MACARAU PO | FATULAUN | 07410 8 4 1 2 1 141 261 |
| | SANDOZ CULOR & CHEMICAL | F.O. FOR 167 | FATRI AUI. | 07410 8 4 1 2 1 121 281 |
| | SANDVIK STEEL I'C. | 20-21 WAGARAW 90. F.D. LOX 357 17:2 / EVINS PU. | FATHLAUN | 07410 8 7 1 1 1 1 1 1 2 1 7 E 1 |
| — ₹ | ARTOLIS LIGHTING & SCHOOL | 141 INNZA LANG | CARFIELD | 07026 7 1 2 1 1 141 261 |
| 2 52 |) SANDVIK STEEL 190. D ARTOLIEH LIGHTIMG & SOUMD D E. C. ELECTROPLATING 190. | 125 CLARK ST. | GARFIFIO | 07026 7 1 2 1 1 121 281 07026 7 1 1 1 1 1 1 1 281 |
| 4 3 | T. A. FARRELL PLATING CO. | 39 ATLANTIC ST. | GARFIFIN | 07026 7 1 1 1 1 1 1 1 2 1 1 |
| H 53 | GARDEN STATE PAPER CO. INC. | 1 FRANKLIN AVE. 120 GREYLOCK AVE. 1 MONTGOMERY ST. 641 MAIN ST. 75 MELMONT AVE. 24 RELLEVILLE AVE. 112 GREYLOCK AVE. 541 MAIN ST. 962 MILL ST. 11 FPANKLIN AVE. 25 GLENWOOD AVE. 440 HOUVER AVE. 65 CHANGE ST. 1 GLITTON AVE. 66 CHANGE ST. 1 GLITTON AVE. 67 MIN ST. 28 CHEMMAN AVE. 68 CHANGE ST. 1 GLITTON AVE. 69 GETTY AVE. 69 JELLINGTON ST. 126 SELLINGTON ST. 126 SELLINGTON ST. 127 CHITTON AVE. 27 CLIFTON BUVO. 3 ENTIN RO. 110 CLIFTON BUVO. 3 ENTIN RO. 112 FIVER RO. 327 COLFAX AVE. 1 CLIFTON BUVO. 3 ENTIN RO. 112 FIVER RO. 327 COLFAX AVE. 1 CLIFTON BUVO. 3 ENTIN RO. 117 CALTON AVF. 1 MEST CENTRAL AVE. 1 TO SOUTH 18TH ST. 17 CALTON AVF. 18 MARKET ST. 18 MARKET ST. 19 MARKET ST. 17 SOUTH 18TH ST. 17 TO RIVER RD. 10-31 STATE HAY. DOB 17-51 STATE HAY. DOB 17-52 CLARP ST. 39 ATLANTIC ST. 39 ATLANTIC ST. 39 ATLANTIC ST. | GARFILLO | 07026 7 6 1 1 1 2A1 2B1 |
| ,,, | - January Brand Contract Contract | | VAN ICEU | 2.020 0 1 1 1 2×1 251 |

PASSAIC VALLEY SEMERAGE COMMISSION - HEAVY METAL SOURCE DETERMINATION PHASE II INDUSTRIAL CONTRIBUTION SUB-AREA 0

| CONTROL | NAME AND AUDRESS OF INDUSTRY | FLOW | | TOTAL | | TOTAL | | YOTAL | | TOTAL | | TOTAL | | TOTA: | | £03.01 | | PAGE 2 |
|---------|---|--------|---------------------------------------|-----------------|-------------------------------|-----------------|-----------------------------|-----------------|---------------------------|-----------------|--------------------------------------|-----------------|---------------------------|---------|---------------------------------------|--------|----|------------------------------------|
| NO. | SANDVIK STEEL INC. 1702 NEVINS RB. | MGD | TOTAL CADMIUM LBS/DAY (MG/L) | | CHROMIUM LRS/DAY (MG/L) | | COPPER LBS/DAY (MG/L) | | LEAD LBS/DAY (MG/L) | | TOTAL NICKEL LBS/DAY (MG/L) | | TOTAL ZINC LBS/DAY (MG/L) | | FOTAL ARSENIC LBS/DAY (MG/L) | | H. | TUTAL ERCURY BS/DAY MG/L> |
| 500 | | | | | | | | | | | - | | _ | | | | _ | |
| | FAIRLAUN | 0.1410 | , | 0.010 | , | 0.022 | , | 0.191 | | 0.119 0.075) | , | 0.076 0.048) | , | 0.099 | , | 0.002 | , | 0.0032 |
| 570 | MICROFILMING CORP. OF AMERICA 21 MARRISTOWN RD. | | ` | 0,0007 | • | 0.0 | • | 011207 | • | 0.0737 | • | 0.0407 | • | 0.0027 | • | 0.0017 | ` | 0.0027 |
| | GLEN ROCK | 0.0913 | , | 0.006 | | 0.079 | | 0.059 | | 0.054 < | | 0.004 | | 0.075 | | 0.001 | | 0,0005 |
| 580 | AVAION DYE & FINISHING CO. INC. 261 MDRRISSEE AVE. | | • | 0.008) | | 0.104) | • | 0.0771 | • | 0.071) | • | 0.005) | (| 0,048) | • | 0.001) | • | 0.001) |
| | HALEDON | 0.0280 | (| 0.002 | (| 0.009 0.038) | (| 0.022 | | 0.001 | , | 0.004 | (| 0.128 4 | | 0.000 | | 0.0015 |
| 590 | HARMON COLOR WORKS 550 BELMONT AVE. | | | | | | | | • | | • | | | | • | | • | |
| | HALEDON | 0.8330 | | 0.125 | | 0.396 | | 3.168 | | 1.501 | | 4.217 | | 24.475 | | 0.042 | | 0.0208 |
| 600 | JERSEY STATE CHEMICAL. 59 LEE AVE. | | • | 0.018) | • | 0.057) | • | 0.456) | • | 0.216) | (| 0.807) | (| 3.523) | ` | 0.006) | • | 0.003) |
| | HALEDON | 0.0070 | | 0.001 | | | | 0.000 | | 0.002 | | 0.000 | | 0.002 | | 0.000 | | 0.0000 |
| 610 | C. A. LAUSBERG # 80NS 351 CLIFTON ST. | | , | | (| 0.005) | (| | • | 0.042) | (| | (| | | | (| 0.000) |
| | HALEBON | 0.000H | (| 0.023 3.420) | (| 0.050 7.540) | (| Q.004 0.569) | (| 0.001 | (| 0.067 | ı | 0.002 | | 0.000 | , | 0.0002 |
| 620 | MANNER DYE & FINISHING CORP. 293 MORRISSEE AVE. | | | | | | | | | | | | | | | | | |
| | HALEDON | 0.0200 | (| 0.004 | | 0.003 | , | 0.022 | , | 0.021 | , | 0.004 | | 0.075 | | 0.000 | , | 0.0063 |
| 1875 | AMERICAN POLYMERS INC. 50 CALIFORNIA AVE. | | • | 010207 | • | | • | 0.1007 | • | 011137 | • | , | • | 0,, | • | 0.001 | • | 0.0377 |
| | PATERBON | 0.0500 | | 0.005 | | 0.010 | , | 0.063 | | 0.010 | | 0.057 | | 0.056 | | 0.000 | | 0.0042 |
| 1880 | ANDARN ELECTRO SERVICE 72 MICHIGAN AVE. | | (| 0.013 | , (| 0.024) | , | 0.151) | , | 0.0251 | (| 0.136) | ` | 0.134) | , | 0.001) | • | 0.010) |
| | PATERSON | 0.0070 | (| 0.001 | | 0.059 | (| 0.012 | , | 0.009 | (| 0.011 | (| 0.005 | | 0.000 | (| 0.0004 |
| 1890 | APPOLLO DYEING & FINISHING CO. 140 SUMMER ST. | | | | • | , | | , | , | | • | | • | | • | | • | 0.0007 |
| | PATERSON | 0.1400 | | 0.009 | | 0.026 | | 0.102 | | 0.061 | | 0.019 | | 0.166 | | 0.001 | | 0.0008 |
| | | | (| 0.008 | • (| 0.022) | (| 0.087) | (| 0.052) | (| 0.016) | (| 0.142) | (| 0.001) | (| 0.001) |

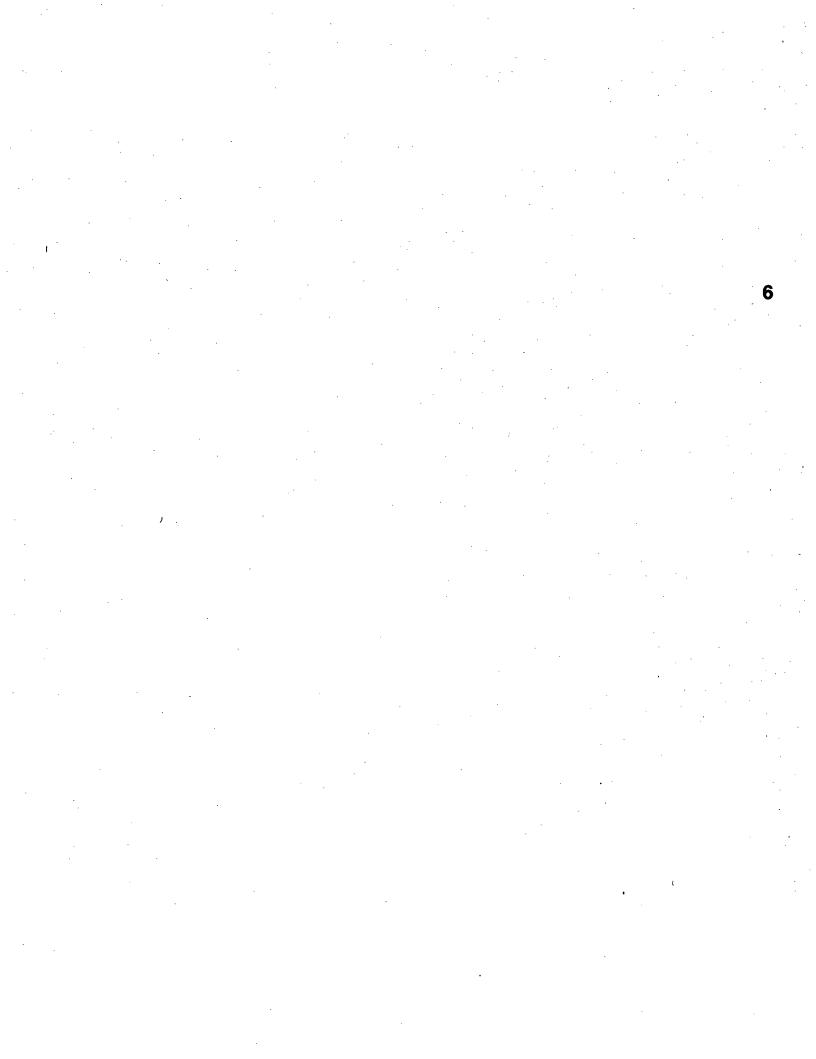
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PASSAIC VALLEY SEWERAGE COMMISSION - HEAVY METAL SOURCE DETERMINATION FHASE II INDUSTRIAL CONTRIBUTION AFTER PRETREATMENT SUB-AREA B

| | | | JUD"HREH B | | | | | | | | | | PAGE 2 | | | | | |
|----------------|---|-------------|------------|------------------------------------|---------|------------------------------------|--------|------------------------------------|--------|----------------------------------|----------|------------------------------------|--------|----------------------------------|--------|------------------------------------|-----------------------|---------------------------|
| CONTROL NO. | NAME AND ADDRESS OF INDUSTRY | FLOW MGD | C# | TOTAL ADMIUM RS/DAY MG/L) | CH (| TOTAL ROMIUM RS/DAY MG/L) | L (| TOTAL COPPER BS/DAY MG/L) | L (| TOTAL LEAD BS/DAY HG/L) | LI () | TOTAL NICKEL BS/DAY MG/L) | L i | TOTAL ZINC BS/DA7 MG/L) | L L | TOTAL RSENIC BS/DAY MG/L) | 1 ME L B (M | OTAL KÜÜK (GZ DA (|
| 500 | SAUDVIK STEEL INC. | | | | | | | | | | | | | | | | | |
| | 1702 NEVINS RG. Fairlawn | 0.1710 | (| 0.010 | , | 0.022 | 1 | 0.191 | , | 0.119 | , | 0.076 | 1 | 0.099 | , | 0.002 | | 0.0032 |
| 570 | MICROFILMING CORP. OF AMERICA 21 HARRISTOWN RD. | | ` | 010007 | ` | 0.0147 | ` | 0.1207 | ` | 010/3/ | ` | (7,0407 | • | 0.0017 | ` | 0,001, | ` | 01002.7 |
| | GLEN ROCK | 0.0910 | (| 0.008) | (| 0.079 | (| 0.058 0.077) | (| 0.054 - | | 0.004 | í | 0.074 (0.098) | | 0.001 | (| 0.0005 |
| 580 | AVAION DYE & FINISHING CO. INC. 261 MORRISSEE AVE. | | | | | | • | | | | | | | , | | | , | |
| | HALEDON | 0.0280 | ı | 0.002 | (| 0.009 | (| 0.022 | | 0.001 | (| 0.004 | (| 0.128 | | 0.000 | (| 0.0015 |
| 590 | HARMON COLOR WORKS 550 BELMONT AVE. HALEDON | 0.8330 | | 0.125 | | 0.396 | | 3.168 | | 1.501 | | 4.217 | | 12.505 | | 0.042 | | 0.0208 |
| 600 | JERSEY STATE CHEMICAL 59 LEE AVE. | | (| 0.018) | (| 0.057) | (| 0,456) | (| 0.216) | (| 0.607) | (| 1.800) | (| 0.006) | (| 0.003) |
| | HALEDON | 0.0070 | , | 0.001 | | 0.000 | | 0.000 | | 0.002 | | 0.000 | , | 0.002 | | 0.000 | , | 0.0000 |
| 610 | C. A. LAUSBERG & SONS 351 CLIFTON ST. | | , | | | | • | | • | | • | | • | | | | • | |
| | HALEDON | 0.0010 | (| 0.004 | (| 0.021 2.500) | (| 0.005 0.569) | (| 0.001 0.084) | (| 0.015 1.800) | (| 0.002 | | 0.000 | í | 0.0003 |
| 620 | MANNER DYE 1 FINISHING CORP. 293 MORRISSEE AVE. | | | | | | | | | | | | | | | | | |
| | HALEDON | 0.0200 | . (| 0.004 | (| 0.003 0.015) | (| 0.022 | (| 0.021 0.125) | (| 0.004 0.025) | (| 0.075 | | 0.000 | Ç | 0.0063 |
| 1875 | AMERICAN FOLYMFRS INC. 50 CALIFORNIA AVE. | | | | | | | | | | | | | | | | | |
| | FATERSON | 0.0500 | (| 0.005 | . (| 0.010 | (| 0.063 0.151) | (| 0.010 0.025) | (| 0.057 | (| 0.056 | | 0.000 | (| 0.004. |
| 1880 | ANDARN ELECTRO SERVICE 72 MICHIGAN AVE. | | | | | | | | | | | | | 0.005 | | 0.025 | | 0.0004 |
| | FATERSON | 0.0070 | (| 0.001 | (| 0.059 1.010) | (| 0.012 | (| 0.009 0.150) | (| 0.011 0.195) | (| 0.005 0.073) | | 0.000 | (| 0.0004 |
| 1890 | APPOLLO DYEING & FINISHING CO. 1 | INC. | | | | | | | | | | | | | | | | |
| | PATERSON | 0.1400 | ı | 0.009 | , (| 0.022) | (| 0.102 | | 0.051 0.052) | (| 0.019 | (| 0.166 | ξ. | • | | 0.0008 |

KLL0138

~-3



PASSAIC VALLEY SEWERAGE COMMISSIONERS APPLICATION FOR A SEWER USE PERMIT

| 1. | Company Name: SANDVIK INC. |
|------------|---|
| | Permit Number if applicable: 08220005 |
| | Location: 1702 NEVINS ROAD FAIR LAWN NJ |
| | Zip Code: 07410 |
| 4 . | Mailing Accress: SAME AS ABOVE |
| | Zip Code: |
| 5. | Person to contact concerning information provided in this application: |
| | Name of Contact Official: WILLIAM DUROW |
| | Title: PRODUCTION MANAGER, BLANKS Phone No.: 201794-5105 |
| | Address: SAME AS ABOVE Zip code: |
| 6. | Number of Employees - Full Time: 250 Part Time: |
| | Number of Work Days Per Year: 260 |
| | Number of Shifts Per Day:3 |
| 7. | If property is owned indicate block and lot number(s): BLOCK 4902 LOT 2 |
| | Assessed Value: 9, 337, 000 (2005) |
| 8. | If property is rented indicate name and address of owner: |
| | N/A OWD POP |
| | Total square feet rented: Na 160, 600 SF 165 Que |
| 9. | List NJPDES Permit Number if applicable, None and |
| | Name of receiving Body of Water entered |

SECTION B

WATER DATA

10. Water Source: (Circle all appropriate answers)

Purchased

⊘- N

Y - (S)

If Y, is it metered

Y - N

Well River

Y -(N)

If Y, is it metered

Y - N

11. Name of purchased water supplier: BOROUGH OF FAIR LAWN WATER DEPT.

List ail Account #'s: 096006

12. Water Received: From Mo. <u>04</u> Yr. <u>04</u> Through Mo. <u>04</u> Yr. <u>05</u>. (* Next to a figure means it is estimated).

| | PURCHASED | WELL . | RIVER | TOTAL |
|----------------------------------|-----------|--------|-------|-----------|
| l ^s Qa. | 4,705,000 | ! | | 4,705,000 |
| 2 ^{πσ} ,Qπ. | 5160000 | | | 5,160,000 |
| 3 ^{rc} Q □ . | 3,910.000 | | | 3.910,000 |
| 4 th Qच. | 4,540,000 | | | 4,540,000 |

GRAND TOTAL 18,315,000

Report in gallons

13. Water Use and Disposition (*Next to a figure means it is estimated).

| | Gallons | Discharged | Gallons Used | | |
|--------------------------|-------------------|-------------------|--------------|--|--|
| | Sanitary/Combined | Stormwater/River/ | Other | | |
| | Sewer | Ditch | | | |
| Sanitary service only | 1,686,200 | | | | |
| Process waste waster | 17, 243, 800 | | | | |
| Cooling water | EN/A I | | | | |
| Evaporation | | | <u> </u> | | |
| Contained in the product | | | | | |
| Other (describe) | | | | | |

GRAND TOTAL 18,930,000

SECTION B (continued)

| To th | ne Separate Sanitary Sewer | ⊘ -N | |
|--|--|--|---|
| To ti | ne Combined Sewer | Y 🔕 | |
| To th | ne Storm Sewer | y . 🌀 | |
| Rive | r or Ditch | У 🔇 | • |
| 5. Waste ha | auler information: List all fir | ns and/or independe | ent contractors used to re |
| process v | waste or sludge from this facil | ity. | |
| ontractor | Address | Icc # | Waste type handled |
| RCO PETROLEU | i i | | |
| SERVICES | MENT PIS THOUSTRIAL RD. | D061563839 | MASTE OIL ALONDE (DRY & WET) |
| NUIRONMEN | Ka Bay Hada | | GRINDING SUDGE |
| , | | 1 | |
| | SE SAL CHARACTERISTICS Se of Industrial Waste is continuation | CTION C | |
| . Discharg | CAL CHARACTERISTICS e of Industrial Waste is contin | nuous | ng čay. |
| Discharg | TAL CHARACTERISTICS te of Industrial Waste is continuitient 20 Hgs | nuouseach operati | |
| Discharg or interm If the dis | AL CHARACTERISTICS e of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur | nuouseach operations between the follo | wing hours: 6:00AM-2 |
| or interm If the dis Brief des | AL CHARACTERISTICS e of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur cription of Manufacturing or | each operations between the folloother activity performance. | wing hours: 6:00 AM - 2 med: MANNEATURE |
| or interm If the dis Brief des | EAL CHARACTERISTICS to of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur cription of Manufacturing or 31DE CUTTING TOOLS - | each operations between the folloother activity performance. | wing hours: 6:00 AM - 2 med: MANNEATURE |
| or intermal of the distribution of the distrib | AL CHARACTERISTICS e of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur cription of Manufacturing or | each operations between the folloother activity performance. | wing hours: 6:00 AM - 2 med: MANNEATURE |
| or interm If the dis Brief des CARI | EAL CHARACTERISTICS to of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur cription of Manufacturing or 31DE CUTTING TOOLS - | each operations between the folloother activity performance. | wing hours: 6:00 AM - 2 med: MANNEATURE |
| or intermal of the distance of | AL CHARACTERISTICS te of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur cription of Manufacturing or SIDE CUTTING TOOLS - NG AND CATING CODE #: 3545 | each operations between the folloother activity performance. PRESSING, GRIN | wing hours: 6:00AM-2 med: MANNFATNRE DING, SINTERING, |
| or intermal or int | CAL CHARACTERISTICS the of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur cription of Manufacturing or SIDE CUTTING TOOLS - | each operations between the folloother activity performances of the second seco | wing hours: 6:00AM-2 med: MANNFATNRE DING, SINTERING, |
| or intermal or int | AL CHARACTERISTICS te of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur cription of Manufacturing or 31DE CUTTING TOOLS - NG AND CATING CODE #: 3545 Raw Materials used: CAR | each operations between the folloother activity performances of the second seco | wing hours: 6:00AM-2 med: MANNFATNRE DING, SINTERING, |
| or intermal or intermal of the distribution of | AL CHARACTERISTICS te of Industrial Waste is continuitient 20 Hgs charge is intermittent, it occur cription of Manufacturing or 31DE CUTTING TOOLS - NG AND CATING CODE #: 3545 Raw Materials used: CAR | each operations between the folloother activity performance of the second of the secon | wing hours: 6:00AM-2 med: MANNFATNRE DING, SINTERING, |

| 20. | Describe sea | sonal variations, if sign | ificant, giving da | tes, volumes | ; rates, hours, e | tc. |
|-----------|---------------|---------------------------|--------------------|-----------------|-------------------|-------------|
| | Include varia | ations in product lines w | | e characterist | tics: | - |
| | | | | | | |
| | Does this fac | pility shutdown for vaca | tion(s)? No | _ If so, is it? | basically the sat | me time |
| | each year.— | Provide dates | usually shutdow | n <u> </u> | | |
| | | | SECTION D | | | |
| <u>M0</u> | NITORING | | · | | | |
| 21. | Describe any | pretreatment process o | r effluent monito | ring system | in use: | |
| | Outlet | <u> </u> | H MONITOR | PH CON | TRAL | |
| | Outlet | 2 N | OT REQUIRE |) | | |
| | Outlet | | | | | |
| 22. | Sampling in | formation: | | | | |
| Ī | | Contains Industrial | | | , | |
| | Outlet | Waste | Sampler Typ | <u>e</u>] | Refrigerated | |
| | | YES ' | PERISTALTIC | COMPOSTE | YES | |

SECTION D (continued)

23. Volume Information:

| Outlet | Daily Flow (Gallons) 2 47,000 | Metered (Y - N) Y | Type | <u>Date</u> | |
|--------|---------------------------------|--------------------------------|------|-------------|--|
| | ≈ 5,000 | N | | | |
| | : | | | | |
| 24. | Frequency of calibration of eac | h flow meter: | J/A | | |

- 25. Attach plot plan of the property showing:
 - (a) all existing or proposed sewer and drain lines (including outlets to a storm sewer, river or ditch);
 - (b) sample point(s); Monitoring or Pretreatment Equipment; Incoming meter(s); Well meter(s); Internal meter (s); Flowmeter(s).
 - (c) details of the connection(s) to the municipal (or PVSC) sewer, including the distance and direction of each connection from the nearest street intersection.

4

SECTION E

ANALYSIS OF INDUSTRIAL WASTE

26. Analysis for Incustrial Waste must be a proper sample taken for each outlet.

OUTLET NO. <u>0822000</u> S-1

| Repo | rt to the nearest unit: XX. | | | to the nearest hundredth | |
|-------------|--------------------------------|------------|----------|------------------------------|--------------|
| Exce | pt where indicated with (1) Ex | kample: 15 | Except | where indicated Examp | le: 0.36 |
| mg/i | | | mg/l | | |
| <u>Code</u> | <u>Parameter</u> | Value | Code | Parameter | <u>Value</u> |
| 0200* | Radioactivity (PL-1) | N/A | 1097* | Antimony (Sb) | N/A |
| 0500 | Total Solids | NA | 1002* | Arsenic (As) | NIA |
| 0505 | Volatile Solids | NA | 1022* | Boron (B) | NA |
| 0530 | Total Suspended Solids | 32 mg/L | 1027 | Cadmium (Cd) | 0.00 |
| 0540 | Volatile Suspended Solids | NA | 1034* | Chromium Total (Cr) | NA |
| 0555 | (1)(3) Petroleum Hydrocarbons | N/A | 1042 | Copper (Cu) | 0.05 |
| 0310 | Biochemical Oxygen Demand | 1 | 1045* | Iron (Fe) | NA |
| | (30D) | <2.∞€/_ | 1051 | Lead (Pb) | D.19 |
| 0340 | Chemical Oxygen Demand (COD) | | G72G*(3) | Cyanide (Cn) | 0.04 |
| | | NA | 1900 | Mercury (Report to 0.XXX) | 0.00 |
| 0680 | Total Organic Carbon (TOC) | | 1067 | Nickel (Ni) | 0.40 |
| | | Alu | 1147* | Seienium (Se) | NA |
| 9000 | pH(standard unit range) | 7.5 | 1077* | Silver (Ag) | NA |
| 0610 | (1) Ammonia as N | NA | 1102* | Tin (Sn) | NIA |
| 0.550 | (1)(3) Total Oil & Grease | NIA | 1092 | Zinc (Zn) | 0.00 |
| 0745* | (i) Sulfide | AIN | 2730 | Phenol | Alu |
| 0507= | (1) Ortho Phosphates as P | NA | 4053* | Pesticides (Report to 0:XXX) | 10 |
| 0625* | (1) Kjeldahl N as N | NIA | | | Ala |
| 9998* | (2)(3) TTO (Report to 0.XXX) | NIA | 9999*(3) | TTVO (Report to 0.XXX) | NA |

FOOTNOTES:

- (1) Report results to the nearest tenth, i.e., 1.6 mg/l.

 (*) Analyze for this if reasonably expected to be present in the discharge unless otherwise exempted.
- (2) See instructions.
- (3) ... Grab sample required

Rev: 1/87 8/89 7/90 9/94 8/95 11/95 07/98

SECTION E (continued)

| Sam | ples collected by: | SANDVIK COROMANT | PERSONNEL |
|------|---------------------------------------|--|-------------------------------------|
| | | · | Date: |
| Sam | pie analyzed by: | ANALYTICAL TESTING | LAB Date: |
| Prod | | red when sample was collected: ENTED CARBIDE CUTTING | Tools |
| 27. | - | analyses of the samples for User ANALYTICAL TESTING LA | |
| 28. | Is the Laboratory o | ertified by NJDEP to conduct all | the analyses (Y) - N |
| 29. | Who performs the | analyses of the samples for the Pr | retreatment Parameters? |
| | | Alu | |
| - | If monitoring has nuse. If unknown, s | ostate: , | indicate Laboratory you plan to |
| 30. | • | ertified by NJDEP to conduct all | the required Pretreatment analyses? |
| 31. | appropriate box tha | edge of materials and processes us at best describes the potential that resent in your discharge | |

SECTION F

PRETREATMENT

| Industrial Category: SIC# 3545 |
|--|
| Subpart (s): NA |
| Compliance date(s): |
| Is facility in compliance? YES If not, and if compliance date has passed, explain |
| actions being taken to get into compliance: |
| |
| Date Baseline Monitoring Report (BMR) submitted to PVSC: |
| Compliance schedule submitted: |
| If yes is facility on schedule? Explain if compliance date will not be met: |
| If yes, describe VES Does this facility have a Spill Prevention Control and Countermeasures (SPCC) plan? If yes, describe VES Cuppentiv Being Prince Princ |
| If yes, describe YES CURRENTLY BEING REVISED |
| Has NJDEP or EPA ever cited this facility for a violation of State or Federal |
| Regulations for the nature of its wastewater discharge? Y - N |
| Is this facility under an ISRA Clean up? No If so, has a plan been approved by |
| NJDEP: |
| Is there any plan to discharge groundwater? |
| |

CERTIFICATION*:

The information contained in this application is familiar to me and, to the best of my knowledge and belief, such information is true, complete and accurate.

If the applicant is a corporation, a corporate resolution is attached granting me the authority to sign the application on behalf of the corporation.

Name of signing official:

WILLIAM DUROW

Print Name

TITLE:

PRODUCTION MANAGER BLANKS

9/19/05

William

- *APPLICATION MUST BE SIGNED BY ONE OF THE FOLLOWING:
 - a. Principal Officer of Corporation
 - b. President or Owner of Company
 - c. General Partner if a Partnership
 - d. Plant Manager or Authorized Representative

TABLE 1 EPA PRIORITY POLLUTANTS

| · · · · · · · · · · · · · · · · · · · | | |
|--|--------|-----------|
| NAME ABCD | A B C | D |
| Acenaphthene X + 2,4 cimethylphenol | | X |
| acrolein 2,4 cinitrotoluene | 1 1 1 | X |
| acrylonitrile | 1 1 1 | X |
| benzene | | X |
| benzicine X ethylbenzene | | X |
| carbon tetrachloride | | X |
| (tetrachloromethane) X (4-chlorophenyl phenyl | ether | X |
| chloropenzene | | X |
| 1,2,4-trichchlorobenzene | | X |
| hexachiorobenzene | | X |
| 1,2 dichloroethane X methylene . | | |
| 1,1,1 trichiorethane X chloride(dichlorometha | me) X | |
| hexachioroethane X methyl chloride | | |
| 1,1,dichloroethane X (chloromethane) | | X |
| 1,1,2 trichloroethane X methyl bromide | | |
| 1,1,2,2 tetrachioroethane (bromomethane) | | X |
| chlorethane X bromoform(tribomome | thane) | X |
| bis(chloromethyl) ether X dichlorobromomethane | | × |
| Bis(2 chloroethyl) ether trichiorofluoromethane | | |
| 2-chloroethyl vinyl ether mixed ; X dichclorodifuoromethan | | X |
| 2-chloronaphthalene | | X |
| 2,4,6, trichlorophenol X hexachlorobutaciene | | X |
| parachlorometa cresol X hexachlorocyclopentaci | iene | X |
| Chloroform (trichloromethane) | | X |
| 2 chiorophenol X naphthalene | | X |
| 1,2, dichlorobenzene | | X |
| 1,3, dichlorobenzene X 2-nitrophenol | 1. | X |
| 1,4, dichlorobenzene X 4-nitrophenol | 1. | X |
| 3.3. dichloroberzidine | | X : |
| 1,1,dichloroethylene X 4,6 dinitro-o cresol | | <u> </u> |
| 1,2 trans-dichloroethylene | | <u> X</u> |
| 2,4,dichlorophenol | | <u> </u> |
| 1,2, dichloropropane N-nitrosodi-n-proplyan | nine | |
| 1,3, dichloropropylene | 1 1 | <u> </u> |
| (1,3 dichclor propene) X phenol | | X |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

TABLE 1 EPA PRIORITY POLLUTANTS (continued)

| NAME | A | В | С | D | | A | В | С | מ |
|-----------------------------|-------------|--------------|---|---------|-----------------------------|---------------|----------|----------|---|
| bis(2-ethylhexyl) phthalate | 1 | i | : | X | endrin | ļ | İ | 1. | X |
| butyibenzylphthalate | ! | : | i | X | l endrin aldahyde | 1 | 1 | i | X |
| di-ri-butylphthalate | 1 | i | i | X | heptachlor | ! | 1 | i | , X |
| di-n-octylphthalate | ! | ; | 1 | X | i heptachior (epoxide) | : | | ! | X |
| ciethylphthalate | i | į | : | X | BHC Alpha | 1 | 1 | i | X |
| dimethylphthalate | ; X | : | 1 | | BHC Beta | į | | | X |
| benzo(a)anthracene | <u> </u> | | : | Y | BHC Gamma | 1 | ; | i | X |
| oenzo(2)oyrene | : | | | X | BHC Deita | 1 | ļ | i | X |
| 3,4 benzofiuoranthene | i | | | X | I PCB1242 | ! | 1 | | X |
| benzo(k) fluoranthane | Ī | i | | X | PC31254 | ! | 1 | ! | X |
| chrysene | 1 | ì | 1 | Y | PC31221 | i | ı | <u>;</u> | X |
| acenaphthylene | i | | l | Y Y | I PCB1232 | ı | : | i | X |
| anthracene | i | ī |] | X | PCB1248 | l | | <u> </u> | X |
| benzo(ghi)perylene | 1 | 1 | | X | PCB1260 | -i | } | | X |
| fluorene | 1 | 1 | | Y | PCB1016 | 1 | į | ì | X |
| phenanthrene | | i | j | Y | l toxaphene | ! | ! | i | 1 X |
| dibenzo (a,h) anthracene | | : | i | X | antimony(total) | ı | ! | 1 | 1 % |
| indeno (1,2,3-c,d) pyrene | i | | | X | arsenic (total | Ī | [| 1 | · γ. |
| pyrene | | ! | i | X | asbestos (fibrous) | 1 | X | 1 | |
| tetrachloroethylene | | Ī | 1 | X | beryllium (total) | | 1 | İ | X |
| toluene | X | Ī | | | cadmium (total) | 1 X | | | |
| trichioroethylene | 1 | l | | X | chromium (total) | 1X | | | |
| vinyl chloride | <u> </u> | | } | X | copper (total) | X | 1 | | 1 |
| eldrin | i | 1 1 | 1 | X | cvanide (total) | | ! X | 1 | |
| dieldrin | <u> </u> | <u> </u> | | X | lead (total) | X_ | ! | 1 | 1 |
| chlordane | ţ | <u> </u> | | X | ! mercury (total) | X | 1 | | <u> </u> |
| 4,4 DDT | 1 | <u> </u> | | X | nickel (total) | X | 1 | <u> </u> | <u> </u> |
| 4,4, DDE | | <u> </u> | | χ | selenium (total) | | <u>i</u> | | X - |
| 4,4, DDD | | <u> </u> | | X | silver (total) | | <u> </u> | 1 | X - |
| endosulfan 1 | <u> </u> | į | | X | thallium (total) | | <u> </u> | 1 | <u> </u> |
| endosulfan 11 | | 1 | | X | zinc (total) | | | 1 | <u> X </u> |
| endosulfan sulfate | | | | _X_ | 2,3,7,8, tetrachlorodibenzo | | | ! | <u> </u> |
| | | <u></u> | | | p-dioxin | | <u> </u> | <u> </u> | <u> </u> |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

TABLE 2 NJDEP EXPANDED PRIORITY POLLUTANTS

| NAME | A | B | С | D | | A | В | C | D |
|-------------------------|-------|---|--------------|---|-----------------------------|-----|------------|--|-----|
| acrylamice | | | ' | X | I n,n-dimethyl aniline | ì | <u>;</u> | <u>. </u> | X |
| amitrole | 1 | | 1 | X | 3,3-dimethyl benzidine | į | i | i | X |
| amyl alcohols | 1 ! | | 1 | X | 1,1-dimethylhydrazine | | <u> </u> | i | X |
| anilne hydrochioride | | | 1 | X | l cioxane | 1 | | <u>; </u> | X |
| anisole | i : | | ; | X | diphynylamine | 1 | ! | i | X |
| auramine | | | , | X | l ethylenimine | 1 | ! <u> </u> | i | X |
| benzowichloride | 1 | | : | X | l hydrazine | ı | - | | ' X |
| benzylamine | | | i | X | 4,4-methylene bis | T | 1 | | X |
| | 1 1 | | ! ' | | i (2-chloraniline) | 1 | 1 | i | X |
| o-chioroaniline | 1 1 | | , | X | 4,4-methylenedianiline | 1 | İ | . | X |
| m-chlorozniline | 1 1 | | 1 | X | I methyl isobutyl ketone | 1 | | | Y |
| p-chloraniline | ıi | | ! | X | l alpha-naphthylamine | 1 | 1 | | X |
| 1-chloro-2-nitrobenzene | 1 1 | | | X | l beta-haphthylamine | 1 | 1 | ! | X |
| 1-chloro-4-nitrobenzene | 1 | | ! | X | n-methylaniline | 1 | 1 | | X |
| chloroprene | !! | | i ! | X | 1,2- phenylenediamine | 1 - | | | X |
| chrysoidine | | | | X | 1,3- phenylenediamine | | | | X |
| cumene | | | | X | 1,4-phenylenediamine | 1 | 1 | | X |
| 2,3-dichloroaniline | | | | X | sudan 1 (solvent yellow 14) | Ī | | | X |
| 2,4-dichioroaniline | | | | X | thiourea | | | l | X |
| 2,5-dichlorozniline | | | | X | toluene sulfonic acids | I | | | Х |
| 3,4-dichloroaniline | li | | | X | toluidines | 1 | | | X |
| 3,5-dichioroaniline | | | | X | xylicines | ! | | | X |
| 1,3-dichloropropene | _ l i | . | | X | | | | | |
| 1.3-dimethoxybenzidine | 1 | | | X | | 1 | | | |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

TABLE 3 EPA HAZARDOUS SUBSTANCES

| NAME | A | B | C | D | | A | В | С | D |
|---|----------|---------------|-------------|--|-------------------------------|----------|--------------|--------------|----------|
| acetaldehyde | - | | 1 | X | ' isopropanolamine | i | 1 | i | X |
| aliyi alcohol | ı | : | : | X | kelthane | | | 1 | X |
| allyl chloride | ! | | : | X | ' kepone | ! | ; | ! | X |
| amyi acetate | j | 1 | ; | X | malathion | į | i | ! | X |
| aniline | , | : | ! | X | mercaptodimethur | l l | ! | 1 | X |
| benzonitrile | | ! | : | X | I methoxychlor | | | į | X |
| benzyl chloride | | i | ; | X | methyl mercaptan | | ! | ! | X |
| butyl acetate | | ! | j | X | methyl methacrylate | ĺ | ļ | ; | X |
| butylamine | ì | , | İ | X | I metaly parathion | İ | i | 1 | X |
| captan | <u> </u> | ! | į | X | mevinphos | İ | ì | | X |
| carbaryi | i | l | ; | X | mexacarbate | ŀ | 1 | | X |
| carbofuran | | j | 1 | X | monoethylamine | 1 | İ | ! | X |
| carbon disulfide | | i | ! | · X | i monomethylamine | i | ; | Ī | X |
| chlorpyrifos | | i | | X | naled | l | Į. | 1 | X_ |
| Couranhos | 1 | | | ' X | I napthenic acid | | | 1 | X |
| cresol | 1 | 1 | j | X | nitrotoluene | 1 | | I | X |
| crotonaldehyde | 1 | ! | | X | parathion | | | I | X |
| cyclohexane | | | 1 | X | phenolsulfanate | | j | | X |
| 2,4-D (2,4-dichlorophenoxy) | | | i | X | bhosgene | i | Ī | | X |
| acetic acid | ; 1 | ı | l | X | propagnite | | | Í | . X |
| diazinon | 1 | | | × | propylene oxide | | | | X |
| dicamba | ! ! | | i | ! X | pyrethrins | | İ | 1 | X |
| dichlobenil | i | } | | X | quinoline | | 1 | | X |
| dichlone | | i | | <u> </u> | ! resorcinol | 1 | 1 | 1 | X |
| 2.2-cichloropropionic acid | _ | | | * | strontium | | 1 | 1 | X |
| cichlorvos | 1 1 | I | | X | Strychnine | <u> </u> | <u> </u> | | X |
| diethylamine | 1 1 | | <u> </u> | X | stryrene | i | <u> </u> | <u> </u> | <u> </u> |
| dimethylamine | | <u> </u> | <u> </u> | X | 2,4,5-T (2,4,5-richloro- | į | | | XI |
| | | | <u> </u> | <u> </u> | phenoxy acetic acid) | | ! | | |
| dinitrobenzene | ! ! | | | <u>_x</u> _ | TDE (tetrachloro- | | | | X |
| diquat | | <u> </u> | 1 | ! | diphenylethane) | | | 1 | - |
| eiguat | | <u>!</u> i | <u> </u> | -X | 2,4,5-TP 2(2,4,5- | i | | i | X |
| disulfoton | 1 1 | <u> </u> | : | X | trichlorophenoxy trichlorofon | | i | | X |
| diuron | | · ! | · | <u>, y</u> | triethylamine | 1 | } | 1 . | X |
| epichlorohvarin | | i I | | | trimethylamine | | 1 | | X |
| 333333333333333333333333333333333333333 | | i | | <u>: </u> | propanoic acid | | | | X |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

TABLE 3 EPA HAZARDOUS SUBSTANCES (continued)

| NAME | ABCD | <u>A</u> <u>B</u> <u>C</u> <u>D</u> |
|--------------------|-------------------|---|
| ethanolamine | X uranium | |
| ethion | vanacium vanacium | X |
| ethylene diamine | vinyl acetate | × |
| ethylene dibromide | x xylene | . X |
| formaldehyde | X xylenol | |
| furfural | / / zirconium | × |
| guthion | , X | |
| isoprene |) Y | |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

SUPPLEMENTAL SEWER USE APPLICATION QUESTIONNAIRE

The following questionnaire must be completed and submitted by all industrial and tax-exempt users making application for a SEWER USE PERMIT. The purpose of this questionnaire is to identify the correct name and address of the applicant and all individuals and entities owning 10% or more of the applicant. This will assist the PVSC by providing necessary information for service of notices, bills and other documents upon the applicant, for service of process as well as the individual to be contacted in the event of an emergency.

BY SIGNING THIS APPLICATION THE APPLICANT IS ACKNOWLEDGING ITS CONTINUING OBLIGATION TO UPDATE THE INFORMATION CONTAINED IN THIS QUESTIONNAIRE. SPECIFICALLY THE APPLICANT UNDERSTANDS THAT IT SHALL NOTIFY THE PVSC WITHIN THIRTY (30) DAYS OF ITS ENTERING INTO A CONTRACT OR AGREEMENT TO TRANSFER ITS CAPITAL STOCK AND/OR 50% OR MORE OF ITS ASSETS. THE APPLICANT SHALL LIKEWISE INFORM THE PVSC, ON A CONTINUING BASIS, OF ALL INDIVIDUALS OR ENTITIES OWNING 10% OR MORE OF THE CAPITAL STOCK OR ASSETS OF THE CORPORATION AND ANY INDIVIDUAL OR ENTITY ENTITLED TO RECEIVE MORE THAN 10% OF THE NET PROFITS OF THE APPLICANT.

FAILURE TO NOTIFY THE PVSC OF ANY CHANGES IN THE CORPORATE STRUCTURE, OWNERSHIP OR PLANNED TRANSFER OF OWNERSHIP WITHIN 15 DAYS OF ITS OCCURRENCE SHALL BE DEEMED A VIOLATION OF THE SEWER USE PERMIT, THE RULES AND REGULATIONS OF THE PVSC AND N.J.S.A. 58:14-1 et. seq.

SECTION ONE

(To be completed by all applicants)

NAME OF APPLICANT: State the complete name of the organization applying for a SEWER USE PERMIT ("Permit"), as it appears on the certificate of incorporation, charter, by-laws, partnership agreement, trust or other official document which establishes the name of the applicant (if no such document exists, state the name the business uses):

Name of Applicant

SANDVIK INC.

TRADE NAME: Identify all trade names, names under which the applicant will be doing or soliciting business and/or fictitious names that the organization will utilize at the location(s) for which this Permit application is made.

Sanduk Coromant

" HOLDING

Trade Name/Fictitious Name

" HARD MATERIALS

MATERIAL TECH.

| BUSINESS ORGANIZATION: | Please check the | appropriate box: | | |
|---|--|---|---|------------|
| Sole Proprietorship Partnership Limited Partnership Corporation Other (describe) | | Trust Joint Venture Non-Profit Co Limited Liabi | - | |
| EMERGENCY CONTACT PERS telephone number of the person(s) the | | | , provide the name, add | ress and |
| Name: WILLIAM DUROW | | | | |
| Street Address: 1702 NEVINS | Rb. | | | |
| City, State & Zip Code: FAIRLA | FO IN, NW | 410 | | |
| Business Telephone: 201 794 S000 | Emergen | | 794-5105 (wm) 794-5104 (GUA) | • |
| PAST NAMES OF APPLICANT. out to the public as doing business it as," fictitious, or informal name. | | | | |
| SANDVIK STEEL INC | <u>Fr</u> | rom (Year) | To (Year) | |
| APPLICANT'S FORMER FACII State of New Jersey at which the appropriate of the such a business was owned or director, officer, key employee or state. | plicant formerly of r operated by any p | perated any aspect of the a | f its business, and any lopplicant, or by any owner | ocation at |
| <u>Address</u> | ~ · | rom To rears) | NJDEP regis. No. and or USEPA I.D. | · |
| | | | | |

| APPLICANT'S FACIL offices, districts or territo applicant is currently ope | ry of the United S | States other than N | DNS. List all locations in any state, inc ew Jersey, or in any foreign country, a | aluding I which the |
|--|--------------------|---------------------|--|------------------------|
| Address | Telephone | Type of | USEPA I.D. and/or any permits (nos. and name of issuing agency | |

SECTION TWO

MANUF.

(To be completed only by Corporations and Limited Liability Companies)

| REGISTERED AGENT: Identify the name and address of the Corporation's Registered Agent: |
|---|
| Name: |
| Company Name: THE Corporation TRUST Co. |
| Street Address: 820 BEAR TAVERN Rd. |
| City, State & Zip Code: WEST TRENTON, NJ 08628 |
| Telephone: (Area Code) |
| DATE AND PLACE OF INCORPORATION/FORMATION: Identify the state where the corporation/LLC was organized and the date on which the Certificate of Incorporation/Formation was filed: |
| State/Country: DELAWARE |
| Date: 1963 |
| 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · |

Certificate of Incorporation No.: SEE ATTACHED

Copy of certificate of incorporation attached?

Yes _____No

DATE AUTHORIZED IN NEW JERSEY: If other than a New Jersey corporation/LLC, state the date on which the corporation/LLC received a Certificate of Authority to Transact Business in New Jersey (and attach copy).

Date: SEE ATTACHED

MEBANE , N.C.

STAFFORD, TX

(9A) 563-5008

(281) 275-4800

(859) 334-8300

OFFICERS. List the following information as to each Officer of the corporation. Use additional copies of this section as necessary.

| | · | • | |
|-----------------------|--|--|----------------|
| Name: JAM | es Baker | Telephone: 201 794 - S000 | |
| | 1702 NEVINS Rd | | |
| Office held PRES. | Date took office | Date of birth | |
| Name: Rick | Askin | Telephone: 201 794 - 5000 (area code) | _ |
| Business address | 1702 NEVINS Rd | FAIR LAWN , NJ | |
| Office heid | Date took office | Date of birth | |
| SECRETAR | <u> </u> | · . | |
| DIRECTORS. I | List the following information as necessary. | s to each Director of the corporation. Use add | itional copies |
| Name: | : | Telephone: (area code) | - 2 - 3 |
| Business address | · : | | • |
| | | | - |
| Office <u>heid</u> | Date took office | Date of birth | |
| | <u> </u> | | |

| Officer or Directo | or of the corpora | RECTORS: List tion at any time duri this section, as necessary | ng the last 10 years an | tion as to each person who was an ad is not listed in the responses | |
|-----------------------|-------------------|--|---|---|---|
| Name and last k | nown address: | ED NUZZAC | τ | | |
| | · · | 1702 NEVINS | RD FAIR LAW | n, n.T. | |
| Position neld | From | To (month/year <u>)</u> | Date of birth | | |
| VICE PRES. | <u>1974</u> | 2003 | | - | - |
| · | | SECTIO | N THREE | | |
| | (To be complete | ed only by Corporat | ions and Limited Liab | ility Companies) | |
| | | | | peneficial or other interest in the of this section as necessary. | |
| Name: Street Address: | | | | | |
| | | | | | |
| City, State & Zip | Code: | | Bus.Phone | | |
| Name: | | | | | |
| Street Address: | • | I | | | |
| City, State & Zip | Code: | | Bus.Phone | | |
| | | | e corporation or Limit Section Two of this Q | ted Liability Corporation, for each questionnaire. | l |
| | | SECTION | ON FOUR | | |
| | (To be | completed only by I | Partnerships or Joint V | 'entures) | |
| Provide a copy of | the partnership | or joint venture agre | ement of applicant. | | |

No

Copy attached?

Yes

OFFICERS. List the following information as to each Officer of the corporation. Use additional copies of this section as necessary.

| Name: ANETTE M | ASKAL | Telephone: 201 794-S000 | |
|---|-------------------------------------|--|----------------|
| | | FAIR LAWN, NI | |
| Office heid TREASURER | Date took | Date of | |
| Name: | | Telephone:(area code) | _ |
| Business address: | | | |
| Office <u>held</u> | Date took office | Date of the birth | |
| | | | , |
| DIRECTORS. List the of this section as necess | e following information as sary. | to each Director of the corporation. Use add | itional copies |
| Name: | | Telephone:(area code) | |
| Business address: | · | | · . |
| Office held_ | Date took office | Date of biπh | · |
| | | | |

| • | | • | |
|------------------------|--------------------|----------------------------|--|
| Officer or Director of | of the corporati | | e following information as to each person who was an the last 10 years and is not listed in the responses ary. |
| Name and last kno | wn address: | PAUL HODGEN 1702 NEVINS | J RD, FAIR LAWN, NJ |
| Position heid | From | To (month/year) | Date of birth |
| SECRETARY | 1974 | 2003 | |
| | | SECTION | THREE |
| I) | o be complete | d only by Corporation | s and Limited Liability Companies) |
| • | | • | ownership, equity, beneficial or other interest in the additional copies of this section as necessary. |
| Name: SANDV | IK AB | | |
| Street Address: S | TORGAT | MA | |
| City, State & Zip Co | ce: SANDV 18118 | IKEN, SWEDEN |] Bus.Phone |
| Name: | | | |
| Street Address: | | ı | |
| City, State & Zip Co | će: | | Bus.Phone |
| | | | orporation or Limited Liability Corporation, for each ction Two of this Questionnaire. |
| | | | |

SECTION FOUR

(To be completed only by Parmerships or Joint Ventures)

| Provide a copy of the | partner | ship or | joint ve | nture | agreement of applicant. | |
|-----------------------|---------|---------|----------|-------|-------------------------|--|
| Copy attached? | | Yes | ******** | No | | |

| TYPE OF ASSOCIATION: | Check One | · . |
|--|---|---------------------------------|
| [] General Parmership | [] Limited Partnership [] | Joint Venture |
| | | |
| | JOINT VENTURERS. List the following copies of this section, as necessary. If eading "limited partners." | |
| Name: | | |
| Street Address: | | |
| City, State & Zip Code: | | , |
| Telephone: | | |
| | | |
| Name: | | |
| Street Address: | | · |
| City, State & Zip Code: | | |
| Telephone: | | <u></u> |
| • | | |
| LIMITED PARTNERS. this section as necessary. | List the following information as to each lin | nited. Use additional copies of |
| Name: | | |
| Street Address: | | |
| City, State & Zip Code: | Telephone: | - |
| | | |
| Name: | | |
| Street Address: | | |
| City, State & Zip Code: | Telephone: | |

| Use additiona | I copies of this section | as necessary. | | • | |
|-------------------------------------|--|--|--|----------------------------------|----------|
| • | | | • | | |
| Name: | | | | | |
| Street Address | : | | | | |
| City, State & Z | Zip Code: | | Telephone: | | |
| Dates during w | vnich individual was a p | oartner: | | | |
| | | | | | |
| Name: | | | | | |
| Street Address: | | | • | | |
| City, State & Z | ip Code: | | | | |
| Telephone: | | | _Telephone | | |
| Dates during w | hich individual was a p | | | - | |
| | | | | | |
| If any of the pe such corporatio | rsons and/or entities lis n provide all information | ned above is a corpora on requested in Sectio | tion or Limited Liab n Two of this Questi | ility Corporation, for ionnaire. | each |
| | | ' SECTION F | IVE | | |
| (| This section to be comother than a sole propras a trust or association | netorship, corporation | | | · |
| FORM OF BU | ISINESS ORGANIZA it was established. | ATION: Describe ho | w the business entit | y is organized and un | der what |
| | | | | | - |
| | | | | | |
| | | | | | |
| Type (trust, trac | le association; estate; e | tc.) | | | |
| Copy attached? | Yes _ | No | | | |
| | | | | | |

(general and limited) and joint venturers of the applicant during the past 10 years that are not listed above.

FORMER PARTNERS/JOINT VENTURERS.

List the following information as to all prior partners

OWNERS, OFFICERS, TRUSTEES, CONTROLLING PARTIES, ETC. List the following information as to each person who owns, controls or is an officer or trustee of the Applicant. If any owner, officer, trustee, or controlling party listed below shall be a corporation, limited liability corporation, or partnership (general or limited liability), the Applicant shall supply the information requested in Sections Two, Three and Four as applicable. Use additional copies of this section as necessary.

| Name: | | |
|-------------------|-------|------------|
| Street Address: | • | |
| City, State & Zip | Coce: | Telephone: |
| Name: | | |
| Street Address: | | |
| City, State & Zip | Code: | Telephone: |

SECTION SIX

CIVIL VIOLATIONS HISTORY

(To be completed by all applicants)

The following questions concern civil violations of environmental protection laws and regulations. In this section, the term "you" refers to the applicant identified in SECTION I, and to any of the following:

- a. Any predecessor firm, or any previous name under which the applicant operated.
- b. Subsidiaries: Any business in which the applicant holds 25% of equity or debt liability.
- c. Sister companies: Any business in which the applicant's parent company holds more than 10% of the equity or debt liability.
- d. Any corporation of which the Applicant is a subsidiary.
- e. Any Officer, Director, Partner, or Joint Venturer of the applicant, and any business concern owned or controlled by any such individual.

Provide a response in each section. Each item penains to all of the entities and individuals listed above. If an answer is None or the item is not applicable, write "None" or "N/A". A question left unanswered will not be presumed "Not applicable" or "None" - THE FORM WILL BE DEEMED INCOMPLETE.

As used below, the term "law or regulation pertaining to protection of the environment" includes laws and regulations relating to the discharge, treatment, storage, processing, recycling or disposal of industrial waste or hazardous waste and any others relating to water and air pollution, discharge of hazardous substances and treatment of hazardous materials. It includes regulations of the Passaic Valley Sewerage Commissioners ("PVSC"), N.J. DEP, the U.S. EPA, the N.J. DOT, and the U.S. Department of Transportation.

| notices, issued to you within the past 10 years by the PVSC, Ne Protection (DEP) or United States Environmental Protection Agnecessary. | ew Jersey Department of Environmental gency. Attach additional sheets if |
|--|--|
| Name of entity cited: SANDVIK INC. | Date Issued: 3/21/84 |
| Address of alleged violation: 1702 NEVINS RD FAIR LAWN, | NJ 07410 |
| Alleged violation: ADMIN. CONSENT ORDER | Type of CITATION |
| Disposition & explanation: SEE ATTACHED P | AGES 001-002. |
| OF ACO | |
| Name of issuing agency: DEP DIV. OF WATER RESOURCES | Docket No.: |
| B. FEDERAL VIOLATION NOTICES. List and explain Prosecution, Administrative Orders and Actions, civil complaints past 10 years by the U.S. Environmental Protection Agency or U. alleged violation of any federal law or regulation pertaining to proceed of this section as necessary. | s, or similar notices issued to you within the S. Department of Transportation for any |
| Name of entity cited: SANDVIK STEEL INC | Date Issued: 1/26/99 |
| Address of alleged violation: LITUNGSTEN SUPERFUND S. | πE |
| RELEASE OF HAZARDONS Alleged violation: SUBSTANCES, POLLUTANTS OR CONTAMINA | Type of Market CITATION |
| Disposition & SEE ATTACHED PAGES 1-2 | OF EPA LETTER |
| Name of issuing agency: US EPA REGIONII | Docket no.: |

NEW JERSEY VIOLATIONS NOTICES. List and explain all Summonses, Notices of Violation,

Notices of Prosecution, Administrative Orders and Actions, civil complaints, settlements, Judicial or Administrative Consent Orders, or Notices of Intent to Deny or Revoke any license or permit, or similar

| Varne of | Date |
|--|---|
| ntity cited: | - - |
| | |
| deress of | |
| leged violation: | |
| | Type of |
| lleged violation: | notice: |
| sposition & | |
| planation: | |
| • | |
| | |
| Tame of issuing agency: | Docket no.: |
| otices of Prosecution, Administrative Orders nd, and Notices of Intent to Deny or Revoke e past 10 years by any state other than the St olation of any law or regulation pertaining to | COUNTRIES. List and explain all Notices of Variances and Actions, Summons, Civil Complaints, Cital a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than a this section as necessary. |
| otices of Prosecution, Administrative Orders and, and Notices of Intent to Deny or Revoke e past 10 years by any state other than the St olation of any law or regulation pertaining to littering offense. Use additional copies of | s and Actions, Summons, Civil Complaints, Cital a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than a this section as necessary. |
| otices of Prosecution, Administrative Orders and, and Notices of Intent to Deny or Revoke the past 10 years by any state other than the State of the state of the | s and Actions, Summons, Civil Complaints, Cit a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than |
| otices of Prosecution, Administrative Orders and, and Notices of Intent to Deny or Revoke e past 10 years by any state other than the St olation of any law or regulation pertaining to littering offense. Use additional copies of ame of stiry cited: | s and Actions, Summons, Civil Complaints, Cit is a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than this section as necessary. Date |
| otices of Prosecution, Administrative Orders and, and Notices of Intent to Deny or Revoke e past 10 years by any state other than the St olation of any law or regulation pertaining to littering offense. Use additional copies of the copies o | s and Actions, Summons, Civil Complaints, Cit is a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than a this section as necessary. Date |
| Notices of Prosecution, Administrative Orders ind, and Notices of Intent to Deny or Revoke the past 10 years by any state other than the St | s and Actions, Summons, Civil Complaints, Cit is a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than a this section as necessary. Date Issued: |
| Notices of Prosecution, Administrative Orders ind, and Notices of Intent to Deny or Revoke the past 10 years by any state other than the Stationary for any law or regulation pertaining to relatering offense. Use additional copies of same of antity cited: Address of slegged violation: | s and Actions, Summons, Civil Complaints, Citic a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than a this section as necessary. Date Issued: Type of |
| Totices of Prosecution, Administrative Orders and, and Notices of Intent to Deny or Revoke the past 10 years by any state other than the State littering of any law or regulation pertaining to relittering offense. Use additional copies of same of antity cited: ddress of deged violation: | s and Actions, Summons, Civil Complaints, Citic a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than a this section as necessary. Date Issued: Type of |
| otices of Prosecution, Administrative Orders and, and Notices of Intent to Deny or Revoke the past 10 years by any state other than the State olation of any law or regulation pertaining to elittering offense. Use additional copies of anne of active cited: ddress of leged violation: lleged violation: | s and Actions, Summons, Civil Complaints, Cit is a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than this section as necessary. Date Issued: Type of notice: |
| otices of Prosecution, Administrative Orders and, and Notices of Intent to Deny or Revoke e past 10 years by any state other than the St olation of any law or regulation pertaining to littering offense. Use additional copies of ame of stiry cited: ddress of lieged violation: lleged violation: | s and Actions, Summons, Civil Complaints, Citic a license or permit, or any similar notices issue tate of New Jersey or by any foreign country, for the protection of the environment, other than a this section as necessary. Date Issued: Type of |
| otices of Prosecution, Administrative Orders and, and Notices of Intent to Deny or Revoke to past 10 years by any state other than the Stolation of any law or regulation pertaining to littering offense. Use additional copies of tity cited: didress of deged violation: sposition & planation: | s and Actions, Summons, Civil Complaints, Civil a license or permit, or any similar notices issurate of New Jersey or by any foreign country, for the protection of the environment, other than this section as necessary. Date Issued: Type of notice: |

NEW JERSEY MUNICIPALITIES AND COUNTIES. List and expiain all Notices of Violation,

Notices of Prosecution, Administrative Orders and Actions, Summonses, civil Complaints, Citations of any kind, and Notices of intent to Deny or Revoke a license or permit, or any similar notices issued to you within

C.

SECTION SEVEN

OTHER CIVIL COURT JUDGMENTS AND PENDING LITIGATION

(To be completed by all applicants)

A. OTHER JUDGMENTS. List and explain all judgments of liability in excess of \$25,000 rendered against the applicant in the past 10 years, starting with the most recent. Use additional copies of this section as necessary.

| Title of case: | Docket No.: |
|---------------------------|---|
| Name & location of court: | Date judgment entered: |
| Nature of suit: | Amt./terms of judgment: |
| | plain all civil suits in which the applicant is presently involved as a rs involving resolution before arbitration boards. Use additional |
| Title of case: | Docket No.: |
| Name & location of court: | Date Filed: |
| Nature of | Status: |

OPEN FOR REVIEW AT SANDVIK FACILITY

SECTION EIGHT

CRIMINAL CHARGES AND CONVICTIONS

(To be completed by all applicants)

List all indictments, accusations, summonses, complaints, and information against the applicant for any crime, felony, misdemeanor, disorderly persons offense, petty disorderly persons offense or criminal violation.

NOTE: You need not list convictions for any violation of Title 39 of the Revised Statutes (N.J.S.A.) or comparable motor vehicle offenses in jurisdictions other than New Jersey. Death by Auto or Vehicular Homicide is considered a criminal offense and must be listed under this item.

List convictions first. Use additional copies of this page as necessary.

| Name of entity | | |
|---|-----------------------------|---|
| charged/convicted: | | |
| Description of crime/offense charged: | | ٠ |
| Date Charged: | Jurisdiction Where Charged: | |
| Indictment information, Complaint No., indictment No. etc., | | |
| | ı | |
| Disposition (if applicable, sentence imposed): | | |

CERTIFICATION

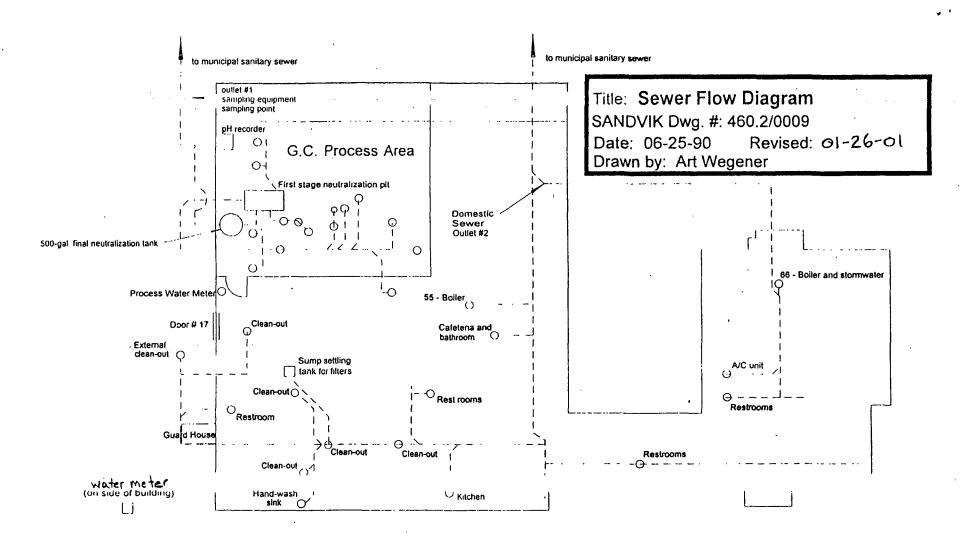
(All applicants must sign and date the following certification)

I hereby certify the answers supplied in the foregoing SUPPLEMENTAL SEWER USE PERMIT APPLICATION QUESTIONNAIRS are true. I am aware that if any of the foregoing responses are willfully false, I am subject to punishment.

Dated: 9/19/05

Print Title & Position





Outlet Designation #:
Outlet # 1: 08401681-18055-001

n:\com\floffice\pvsc\eewer-3.dw2

| | | PASSAIC VALLEY SEW APPLICATION FOR | VERAGE COMN A SEWER USE | MISSIPHERS PERMITO | HAL 12 8115 | <u>8120</u> | 8205 |
|----|----------------------|--|----------------------------|-----------------------|----------------|--------------|--------------|
| | | SEC | TION A | | FEB | 2 2001 | |
| 1. | Company Name | Sanduk | Coromant | - Compan | Y | | |
| 2. | Permit Number if | applicable: 08-401 6 | 81-1855-008 | 31,08-40 | 682 | -18os | S-00BI |
| 3. | Location: 17 | 02 Nevins Rd | | • | | | |
| | Fair Lawn, | N2 | | Zip Code | : <u>0</u> | 7410 | |
| 4. | | SAME | | | | | |
| | | | | Zip Code | : | - | , |
| 5. | Person to contact | concerning information | provided in this | s application: | | | |
| | | Official: Willia | | | | | |
| | Title: Facilit | y Engineer | | Pho | one N | 0. (201)7 | 94-5.105 |
| | Address Sam | | | Zip code | | | <u> </u> |
| 6. | Number of Emplo | yees - Full Time: 250 | Part Time | e: | | | |
| | Number of Work | Days Per Year:288 | 3 | | | | • |
| | Number of Shifts | Per Day: 3 | | | | | • |
| 7. | <u> </u> | ed indicate block and lot 4902 Lo+2 | number(s): | · | | | |
| | Assessed Value: | 7,061,000 | | 2000 | | | |
| 8. | If property is rente | ed indicate name and add | iress of owner: | | | | |
| | | NA | | | | | |
| | Total square feet r | ented: | | | | | |
| 9. | List NJPDES Perr | nit Number if applicable | , No | ne | | | _ and |
| | Name of receiving | Body of Water entered | | | | | |

SECTION B

WATER DATA

| 10. | Water Sou | rce: (Circle all appr Purchased | opriate ansv | wers) | | |
|-----|----------------------|--|--------------------|---------------------|---------|-----------------|
| | | Well | Y -(N) | If Y, is it metered | Y - N | |
| | | River | Y -(N) | If Y, is it metered | Y - N | |
| 11. | Name of p | urchased water sup | plier: <u>Boro</u> | ugh of Fairtaw | n Water | Dept. |
| | | count #'s: 🔻 💍 💍 | | | | · |
| 12. | | ived: From Mo. <u>lo</u> a figure means it is | | | 9 | Yr. <u>00</u> . |
| | : | PURCHASED | WELL | RIVER | | TOTAL |
| | 1 st Qtr. | 3,140,000 | | | | 3,140,000 |
| | 2 nd Qtr. | 3,660,000 | | | | 3,660,000 |
| | 3 rd Qtr. | 4,630,000 | | | | 4,630,000 |
| | 4 th Qtr. | 3650,000 | | | | 3 650,000 |

GRAND TOTAL 15,080,000

Report in gallons

3,650,000

13. Water Use and Disposition (*Next to a figure means it is estimated).

3,650,000

| | Gallons | Discharged | Gallons Used |
|--------------------------|-------------------|-------------------|--------------|
| 1 | Sanitary/Combined | Stormwater/River/ | Other |
| · | Sewer | Ditch | |
| Sanitary service only | 2,520,000 | | |
| Process waste waster | 12,560,000 | | |
| Cooling water | 1NAJ | | |
| Evaporation | | | |
| Contained in the product | | | |
| Other (describe) | | | |

GRAND TOTAL _15080,000

SECTION B (continued)

| 14. | Process was | tewater which is discharged as | shove is metere | d as follows: | | |
|----------------------|--------------------|---|------------------|-------------------------------|--|--|
| 17. | | _ | Ø-N | u as ionows. | | |
| | | ombined Sewer | Y -6 | | | |
| | | orm Sewer | Y - (() | | | |
| | River or I | | Y -(N) | | | |
| 15. | | r information: List all firms an | _ | it contractors used to remove | | |
| | | te or sludge from this facility. | or maoponaon | | | |
| Con | tractor | Address | Icc# | Waste type handled | | |
| 1 | ide Recovery . | 735 South Tamiami Trail Sarasota F/ 34231 | NIA | Carbide | | |
| | waste, Inc | 105 Jacobus Ave South Kearney NI 07032 | N3D991291105 | anding Stude : | | |
| | retroleum vices | 450 South Front St. Elizabeth, NJ 07202 | D061 56 3839 | 1 0 / | | |
| <u>OPE</u> 16. | | CHARACTERISTICS f Industrial Waste is continuous | S | | | |
| | | | | | | |
| 10. | _ | | | | | |
| | or intermitte | nt 20 hrs. | _ each operating | g day. | | |
| | If the discha | rge is intermittent, it occurs bet | ween the follow | ring hours: 6:00 Am + 2:00 Am | | |
| 17. | Brief descrip | otion of Manufacturing or other | activity perform | ned: Manufacture | | |
| | | utting tools, process consis | _ | | | |
| | | ting insorts | or picsor | Grawen Bright | | |
| | | 2517 | | | | |
| List SIC CODE #:3545 | | | | | | |
| 18. | Principal Ra | w Materials used: In manu! | -carbide po | wder mixtures | | |
| | Counting Oper | mation TiCla, HCI, H25 | $N^2, Co^2,$ | oure aluminum pellets | | |
| 19. | | | ted carbid | e metal working | | |

| 20. | Describe seas | Describe seasonal variations, if significant, giving dates, volumes, rates, hours, etc. | | | | | |
|-----|--|---|-----------------------------|--------------|--|--|--|
| | | ions in product lines wh | ich affect waste characteri | stics: | | | |
| | Does this facility shutdown for vacation(s)? No If so, is it basically the same to each year. Provide dates usually shutdown | | | | | | |
| MC | DNITORING | 1 | SECTIOND | | | | |
| 21. | | pretreatment process or | effluent monitoring syster | n in use: | | | |
| | _ | | Monitor Ph contro | 1 | | | |
| | Outlet | 2 <u>No</u> | A Reguired | | | | |
| | Outlet | | | • | | | |
| 22. | Sampling inf | ormation: | | | | | |
| | | Contains Industrial | | | | | |
| | Outlet | <u>Waste</u> | Sampler Type | Refrigerated | | | |
| | | yes | Peristatic Composite | Ves | | | |
| | 1 | | | | | | |

SECTION D (continued)

23. Volume Information:

| Outlet | • | Daily Flow (Gallons) | Metered $(Y - N)$ | Type | <u>Date</u> |
|--------|----------------|----------------------|-------------------|---------------------|-------------|
| | 1 | 22,000 | yes | | • • • |
| 2 | | 13,000 | N | | |
| | | | | | |
| 24. | Frequency of o | alibration of each | flow meter: | <u>4</u> \ <i>N</i> | |

- 25. Attach plot plan of the property showing:
 - (a) all existing or proposed sewer and drain lines (including outlets to a storm sewer, river or ditch);
 - (b) sample point(s); Monitoring or Pretreatment Equipment; Incoming meter(s); Well meter(s); Internal meter (s); Flowmeter(s).
 - (c) details of the connection(s) to the municipal (or PVSC) sewer, including the distance and direction of each connection from the nearest street intersection.

SECTION E

ANALYSIS OF INDUSTRIAL WASTE

26. Analysis for Industrial Waste must be a proper sample taken for each outlet.

OUTLET NO. (#1) 08220005-1

| Repo | ort to the nearest unit: XX. | ······································ | Report | to the nearest hundredt | h: 0.XX |
|---|-------------------------------|--|--------------------------------------|------------------------------|---------|
| Except where indicated with (1) Example: 15 | | | Except where indicated Example: 0.36 | | |
| mg/l | | | mg/l | | |
| Code | <u>Parameter</u> | Value | Code | <u>Parameter</u> | Value |
| 0200* | Radioactivity (PL-1) | Aln | 1097* | Antimony (Sb) | NA |
| 0500 | Total Solids | NA | 1002* | Arsenic (As) | N/A |
| 0505 | Volatile.Solids | NIA | 1022* | Boron (B) | NA |
| 0530 | Total Suspended Solids | 32 mg/L | 1027 | Cadmium (Cd) | 0.00 |
| 0540 | Volatile Suspended Solids | NIA | 1034* | Chromium Total (Cr) | u/a |
| 0555 | (1)(3) Petroleum Hydrocarbons | Alu | 1042 | Copper (Cu) | 0,05 |
| 0310 | Biochemical Oxygen Demand | | 1045* | Iron (Fe) | Ala |
| | (BOD) | 1200 ms/L | 1051 | Lead (Pb) | 0.19 |
| 0340 | Chemical Oxygen Demand (COD) | | 0720*(3) | Cyanide (Cn) | 0.04 |
| | | 2/9 | 1900 | Mercury (Report to 0.XXX) | 0.00 |
| 0680 | Total Organic Carbon (TOC) | 4 | 1067 | Nickel (Ni) | 0.40 |
| | | NA | 1147* | Selenium (Se) | NA |
| 9000 | pH(standard unit range) | 15 | 1077* | Silver (Ag) | NA |
| 0610 | (1) Ammonia as N | N/A | 1102* | Tin (Sn) | 4/4 |
| 0550 | (1)(3) Total Oil & Grease | AIN | 1092 | Zinc (Zn) | 0.00 |
| 0745* | (1) Sulfide | NIA | 2730 | Phenol | NA |
| 0507* | (1) Ortho Phosphates as P | N/A | 4053* | Pesticides (Report to 0.XXX) | NA |
| 0625* | (1) Kjeldahl N as N | NIA | 0940* | Chlorides | NI |
| 9998* | (2)(3) TTO (Report to 0.XXX) | N/A | 9999*(3) | TTVO (Report to 0.XXX) | Alu |

FOOTNOTES:

- (1) Report results to the nearest tenth, i.e., 1.6 mg/l.
 - (*) Analyze for this if reasonably expected to be present in the discharge unless otherwise exempted.
- (2) See instructions.
- (3) Grab sample required

Rev 1/87 8/89 7/90 9/94 8/95 11/95 07/98

SECTION E (continued)

| Sam | iples collected by: Sandvik Coromant Personnel |
|------|---|
| | Date: |
| Sam | ple analyzed by: Analytical Testing Date: |
| Prod | lucts being manufactured when sample was collected: Cemented Carbide Cutting Tools |
| 27. | Who performs the analyses of the samples for User Charge? |
| 28. | Is the Laboratory certified by NJDEP to conduct all the analyses ? N |
| 29. | Who performs the analyses of the samples for the Pretreatment Parameters? |
| | ALA |
| | If monitoring has not commenced for Pretreatment, indicate Laboratory you plan to use. If unknown, so state: |
| 30. | Is the Laboratory certified by NJDEP to conduct all the required Pretreatment analyses? $Y - N = \frac{N/A}{N}$ |
| 31. | Based upon knowledge of materials and processes used at this facility check the appropriate box that best describes the potential that a Priority Pollutant, listed on Tables 1.2 & 3 is present in your discharge. |

SECTION F

PRETREATMENT

| Date Baseline Monitoring Report (BMR) submitted to PVSC: Compliance schedule submitted: Ly/A If yes is facility on schedule? Explain if compliance date will not be met: Does this facility come under the Resource Conservation and Recovery Act (RCRA)? If yes, describe | Industrial Category: SIC # 3545 |
|--|---|
| Is facility in compliance? Ves If not, and if compliance date has passed, expla actions being taken to get into compliance: Date Baseline Monitoring Report (BMR) submitted to PVSC: Compliance schedule submitted: Does this facility on schedule? Explain if compliance date will not be met: Does this facility come under the Resource Conservation and Recovery Act (RCRA)? If yes, describe Ves Does this facility have a Spill Prevention Control and Countermeasures (SPCC) plan? If yes, describe Ves Regulations for the nature of its wastewater discharge? Y - N Is this facility under an ISRA Clean up? No If so, has a plan been approved by NJDEP: | Subpart (s): N/A |
| Date Baseline Monitoring Report (BMR) submitted to PVSC: Compliance schedule submitted: N/A If yes is facility on schedule? Explain if compliance date will not be met: Does this facility come under the Resource Conservation and Recovery Act (RCRA)? If yes, describe Ves Does this facility have a Spill Prevention Control and Countermeasures (SPCC) plan? If yes, describe Yes Yes Explain if compliance date will not be met: Ones this facility come under the Resource Conservation and Recovery Act (RCRA)? If yes, describe Yes Yes Yes Yes If yes, describe Yes Yes Yes Yes If yes, describe Yes Yes Yes Yes Yes Yes Yes Y | Compliance date(s): N/A |
| If yes is facility on schedule?Explain if compliance date will not be met: Does this facility come under the Resource Conservation and Recovery Act (RCRA)? If yes, describe | · |
| Explain if compliance date will not be met: Does this facility come under the Resource Conservation and Recovery Act (RCRA)? If yes, describe Does this facility have a Spill Prevention Control and Countermeasures (SPCC) plan? If yes, describe Yes Has this facility even been cited by NJDEP or EPA for a violation of State or Federal Regulations for the nature of its wastewater discharge? Y Is this facility under an ISRA Clean up? No If so, has a plan been approved by NJDEP: | Date Baseline Monitoring Report (BMR) submitted to PVSC: |
| Does this facility come under the Resource Conservation and Recovery Act (RCRA)? If yes, describe Does this facility have a Spill Prevention Control and Countermeasures (SPCC) plan? If yes, describe See enclosed Has this facility even been cited by NJDEP or EPA for a violation of State or Federal Regulations for the nature of its wastewater discharge? Y - N Is this facility under an ISRA Clean up? No If so, has a plan been approved by NJDEP: | Compliance schedule submitted: N/A |
| Does this facility have a Spill Prevention Control and Countermeasures (SPCC) plan? If yes, describe See enclosed Has this facility even been cited by NJDEP or EPA for a violation of State or Federal Regulations for the nature of its wastewater discharge? Y - N Is this facility under an ISRA Clean up? No If so, has a plan been approved by NJDEP: | If yes is facility on schedule? Explain if compliance date will not be met: |
| Regulations for the nature of its wastewater discharge? Y - N Is this facility under an ISRA Clean up? No If so, has a plan been approved by NJDEP: | Does this facility have a Spill Prevention Control and Countermeasures (SPCC) plan? |
| Is this facility under an ISRA Clean up? No If so, has a plan been approved by NJDEP: | • |
| Is there any plan to discharge groundwater? | Is this facility under an ISRA Clean up? No If so, has a plan been approved by |
| | |
| | |

CERTIFICATION*:

The information contained in this application is familiar to me and, to the best of my knowledge and belief, such information is true, complete and accurate.

If the applicant is a corporation, a corporate resolution is attached granting me the authority to sign the application on behalf of the corporation.

| Name of signing official: | William Durow | |
|---------------------------|---------------|---|
| | Print Name | |
| TITLE: Facilit | Ly Engineer | |
| 1/26/01 | William Durow | • |
| DATE | SIGNATURE | |

*APPLICATION MUST BE SIGNED BY ONE OF THE FOLLOWING:

- a. Principal Officer of Corporation
- b. President or Owner of Company
- c. General Partner if a Partnership
- d. Plant Manager or Authorized Representative

TABLE 1 EPA PRIORITY POLLUTANTS

| NAME | A | В | C | D | | A | В | С | D |
|---------------------------------|-----|---|-----|-----|------------------------------|--|----------|----------|----------|
| Acenaphthene | + | _ | | X | 2,4 dimethylphenol | | | | X |
| acrolein | 1 | | | X | 2,4 dinitrotoluene | | | | X |
| acrylonitrile | | | | X | 2,6 dinitrotoluene | | | | X |
| benzene | | | | X | 1,2 diphenylhydrazine | | | | X |
| benzidine | | | | X | ethylbenzene | | | | X |
| carbon tetrachloride | | | | X | fluoranthene | | | | X |
| (tetrachloromethane) | | | | X | 4-chlorophenyl phenyl ether | | | | X |
| chlorobenzene | | | | X | 4-bromophenyl phenyl ether | | | | X |
| 1,2,4-trichchlorobenzene | | | | X | bis(2-chlorosispropyl) ether | | | | × |
| hexachlorobenzene | | | | X | bis(2-chloroethoxy) methane | | | | × |
| 1,2 dichloroethane | | | | X | methylene | V | | } | |
| 1,1,1 trichlorethane | X | | | | chloride(dichloromethane) | X | | | |
| hexachloroethane | | | | X | methyl chloride | | | | X |
| 1,1,dichloroethane | | | | X | (chloromethane) | | | <u> </u> | . X |
| 1,1,2 trichloroethane | | | | X | methyl bromide | | | | |
| 1,1,2,2 tetrachloroethane | | | | X | (bromomethane) | l | | | \times |
| chlorethane | | | | X | bromoform(tribomomethane) | | | | X |
| bis(chloromethyl) ether | | | | X | dichlorobromomethane | | | | × |
| Bis(2 chloroethyl) ether | | | | X | trichlorofluoromethane | X | | | |
| 2-chloroethyl vinyl ether mixed | | | | X | dichclorodifuoromethane | | | | X |
| 2-chloronaphthalene | | | | X | chlorodibromomethane | | | | χ_ |
| 2,4,6, trichlorophenol | | | | X | hexachlorobutadiene | | | | X |
| parachlorometa cresol | | | | X | hexachlorocyclopentadiene | | | | X |
| Chloroform (trichloromethane) | | | | X | isophorone | | | | 7 |
| 2 chlorophenol | | | | χ̈́ | naphthalene | | | | * |
| 1,2, dichlorobenzene | | | | X | nitrobenzene | | | | * |
| 1,3, dichlorobenzene | | | | X | 2-nitrophenol | | | | X |
| 1,4, dichlorobenzene | | | | X | 4-nitrophenol | | L | | × |
| 3.3 dichlorohenzidine | | | | _X_ | 2.4-dinitrophenol | <u> </u> | | | Х |
| 1,1,dichloroethylene | 1 | | | X | 4,6 dinitro-o cresol | <u> </u> | | | X |
| 1,2 trans-dichloroethylene | | | | X | N-nitrosodimethylamine | ļ | | | |
| 2,4,dichlorophenol | 1 | | · . | X | N-nitrosodiphenlamine | | | | × |
| 1,2, dichloropropane | 1-1 | | | X | N-nitrosodi-n-proplyamine | | | | X |
| 1,3, dichloropropylene | 4 | | | 1 | pentachlorophenol | | · | | メ |
| (1,3 dichelor propene) | | | | 上上 | phenol | } | <u> </u> | \ | X |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

TABLE 1 EPA PRIORITY POLLUTANTS (continued)

| NAME | A | В | C | D | | A | В | С | D |
|-----------------------------|-----|---|---|----------|-----------------------------|---|---|---|----|
| bis(2-ethylhexyl) phthalate | | | | X | endrin | 1 | | | |
| butylbenzylphthalate | | | | X | endrin aldahyde | | | | |
| di-n-butylphthalate | | | | X | heptachlor | | | | |
| di-n-octylphthalate | | | | X | heptachlor (epoxide) | | | | |
| diethylphthalate | | | | X | BHC Alpha | | | | |
| dimethylphthalate | X | | | | BHC Beta | | | | |
| benzo(a)anthracene | | | | × | BHC Gamma | | | | |
| benzo(a)pyrene | | | | X | BHC Delta | | | | |
| 3,4 benzofluoranthene | | | | X | PCB1242 | | | | |
| benzo(k) fluoranthane | | | | X | PCB1254 | | | | |
| chrysene | | | | X | PCB1221 | | | | |
| acenaphthylene | | | | X | PCB1232 | | | | |
| anthracene | | | | 7 | PCB1248 | | | | 7. |
| benzo(ghi)perylene | | | | X | PCB1260 | | | | |
| fluorene | | | | X | PCB1016 | | | | |
| phenanthrene | | | | X | toxaphene | | | | |
| dibenzo (a,h) anthracene | | | | X | antimony(total) | | | | |
| indeno (1,2,3-c,d) pyrene | | | | X | arsenic (total | | | | |
| pyrene | | | | χ | asbestos (fibrous) | | Х | | |
| tetrachloroethylene | | | | X | beryllium (total) | | | | X |
| toluene | 7 | | | | cadmium (total) | X | | | |
| trichloroethylene | | | | X | chromium (total) | | | | |
| vinyl chloride | İ | | | X | copper (total) | X | | | |
| aldrin | | | | X | cvanide (total) | | × | | |
| dieldrin | | | | * | lead (total) | 1 | | | |
| chlordane | 1 1 | | | X | mercury (total) | X | | | |
| 4,4 DDT | 1 ! | | | X | nickel (total) | X | | | |
| 4,4, DDE | _ | | | χ | selenium (total) | | | | X |
| 4,4, DDD | | | | _X_ | silver (total) | | | | × |
| endosulfan l | | |] | -4 | thallium (total) | | | | X |
| endosulfan 11 | ! ! | | | <u> </u> | zinc (total) | | | | X |
| endosulfan sulfate | | | | 1 | 2.3,7,8, tetrachlorodibenzo | | | | X |
| | 1 1 | | | | p-dioxin | | | | * |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

TABLE 2 NJDEP EXPANDED PRIORITY POLLUTANTS

| NAME | A | В | С | D | | A | В | C | D |
|-------------------------|---|---|---|----|-----------------------------|--|---|---|---|
| acrylamide | | | | Y | n,n-dimethyl aniline | | | | X |
| amitrole | | | | X | 3,3-dimethyl benzidine | | | | Χ |
| amyl alcohols | | | | X | 1,1-dimethylhydrazine | | | | X |
| anilne hydrochloride | | | | × | dioxane | | | | X |
| anisole | | | | χ | diphynylamine | | | | × |
| auramine | | | | X | ethylenimine | | | | × |
| benzotrichloride | | | | X | hydrazine | | | | X |
| benzylamine | | | | X | 4,4-methylene bis | | | | × |
| | | | | | (2-chloraniline) | | | | |
| o-chloroaniline | | | | Y, | 4,4-methylenedianiline | | | | X |
| m-chloroaniline | | | | 4 | methyl isobutyl ketone | 1 | | | X |
| p-chloraniline | | | | Ϋ́ | alpha-naphthylamine | | | | Х |
| 1-chloro-2-nitrobenzene | | | | × | beta-naphthylamine | | | | X |
| 1-chloro-4-nitrobenzene | | | | X | n-methylaniline | T | | | X |
| chloroprene | | | | _χ | 1,2- phenylenediamine | | | | Χ |
| chrysoidine | | | | γ | 1,3- phenylenediamine | | | | X |
| cumene | | | | ķ | 1,4-phenylenediamine | | | | X |
| 2,3-dichloroaniline | | | | X | sudan 1 (solvent yellow 14) | | | | X |
| 2,4-dichloroaniline | | | | X | thiourea | | | | X |
| 2,5-dichloroaniline | | | | Х | toluene sulfonic acids | | | | X |
| 3,4-dichloroaniline | | | | Х | toluidines | 1 | | | X |
| 3,5-dichloroaniline | | | | × | xylidines | 1 | | | × |
| 1,3-dichloropropene | | | | X | · | | | | |
| 1.3-dimethoxybenzidine | | | | Х | | | | | |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

TABLE 3 EPA HAZARDOUS SUBSTANCES

| NAME | A | В | С | D | | A | В | С | D |
|-----------------------------|--------------------|---|---|----------|----------------------------------|---|---|---|----------------|
| acetaldehyde | | | | X | isopropanolamine . | | | | K |
| allyl alcohol | | | | Υ(| kelthane | | | | X |
| allyl chloride | | | | X | kepone | | | | X |
| arnyl acetate | | | | Y | malathion | | | | X |
| ariline | | | | X | mercaptodimethur | | | | χ |
| benzonitrile | } | | • | X | methoxychlor | | | | Х |
| benzyl chloride | | | | X | methyl mercaptan | | | | Χ |
| butyl acetate | | | | X | methyl methacrylate | | | | K |
| butylamine | | | | Y | methly parathion | | | | χ |
| captan | | | | X | mevinphos | | | | χ |
| carbaryl | | | | X | mexacarbate | | | | χ |
| carbofuran | | | | * | monoethylamine | | | | χ |
| carbon disulfide | | | | X | monomethylamine | | | | X |
| chlorpyrifos | | | | X | naled | | | | χ. |
| coumaphos | | | | X | napthenic acid | | | | V |
| cresol | | | | X | nitrotoluene | | | | Ϋ́ |
| crotonaldehyde | | | | X | parathion | | | | Ϋ́ |
| cyclohexane | | | | κ | phenolsulfanate | | | | Х |
| 2,4-D (2,4-dichlorophenoxy) | | | | χ | phosgene | | | } | χ |
| acetic acid | | | | Х | propagrite | | | , | Χ |
| diazinon | | | | _X_ | propylene oxide | | | | X |
| dicamba | | | | Χ | рутеthrins | | | | X |
| dichlobenil | | | | _ X | quinoline | | | | χ |
| dichlone | | | | Ý | resorcinol | | | | X |
| 2,2-dichloropropionic acid | | | | Υ | strontium | | | · | χ_ |
| dichlorvos | 1 ! | | | X | strychnine | | | | |
| diethylamine | | | | X | stryrene | _ | | | X |
| dimethylamine | | | | X | 2,4,5-T (2,4,5-trichloro- | | | | V |
| | | | | | phenoxy acetic acid) | | | | X |
| dinitrobenzene | | | | X | TDE (tetrachloro- | | | | V |
| diamet | | | - | | diphenylethane) | | | | |
| diquat | | | | X | 2,4,5-TP 2(2,4,5- | | | | X |
| disulfoton | - - | | | χ | trichlorophenoxy trichlorofon | | | | \ |
| diuron | - - | | | χ | triethylamine | | | | _ |
| epichlorohydrin | + | | | × | trimethylamine | | | | |
| op.oo.o.iijaini | | | | | propanoic acid | | | | - C |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

TABLE 3 EPA HAZARDOUS SUBSTANCES (continued)

| NAME | A | <u>B</u> | C | D | · | A | <u>B</u> | C | D |
|--------------------|---|----------|---|---|---------------|---|----------|---|---|
| ethanolamine | | | | X | uranium | | | | Х |
| ethion | | | | χ | vanadium | X | | | |
| ethylene diamine | | | | (| vinyl acetate | | | | X |
| ethylene dibromide | | | | X | xylene | X | | | |
| formaldehyde | X | | | | xylenol | | | | χ |
| furfural | | | | X | zirconium | X | | | |
| guthion | | | | K | | | | | - |
| isoprene | | | | χ | | | | | _ |

- A. KNOWN TO BE PRESENT
- B. SUSPECTED TO BE PRESENT
- C. KNOWN TO BE ABSENT
- D. SUSPECT TO BE ABSENT

SECTION TWO

(To be completed only by Corporations and Limited Liability Companies)

| REGISTERED AGENT: Identify the name and address of the Corporations's Registered Agent: |
|--|
| Name: |
| Company Name: The Corporation Trust Co. |
| Street Address: 820 Bear Tavern Rd |
| City, State & Zip Code: West Tremon, NJ 08628 |
| • |
| DATE AND PLACE OF INCORPORATION/FORMATION: Identify the state where the corporation/LLC was organized and the date on which the Certificate of Incorporation/Formation was filed: |
| State Delaware |
| State: <u>Delaware</u> Date: 1963 |
| DATE AUTHORIZED IN NEW JERSEY: If other than a New Jersey corporation/LLC, state the date on which the corporation/LLC received a Certificate of Authority to Transact Business in New Jersey (and attach copy). Date: 3/4/63 |
| |
| SECTION THREE (To be completed only by Partnerships or Joint Ventures) |
| FORM OF PARTNERSHIP: Check One. |
| General partnership Limited Partnership |
| PARTNERS: Identify (by name, residence address, business address and daytime telephone number) each partner or joint venture. (attach additional sheets if necessary): |
| Name: |
| Street Address: |
| City, State & Zip Code: |
| |
| Name: |
| Street Address: |
| City, State & Zip Code: |

SUPPLEMENTAL SEWER USE PERMIT APPLICATION QUESTIONNAIRE

The following questionnaire must be completed and submitted by all industrial and tax-exempt users making application for a SEWER USE PERMIT. The purpose of this questionnaire is to identify the correct name of the applicant for service of process and the individual to be contacted in the event of an emergency.

SECTION ONE

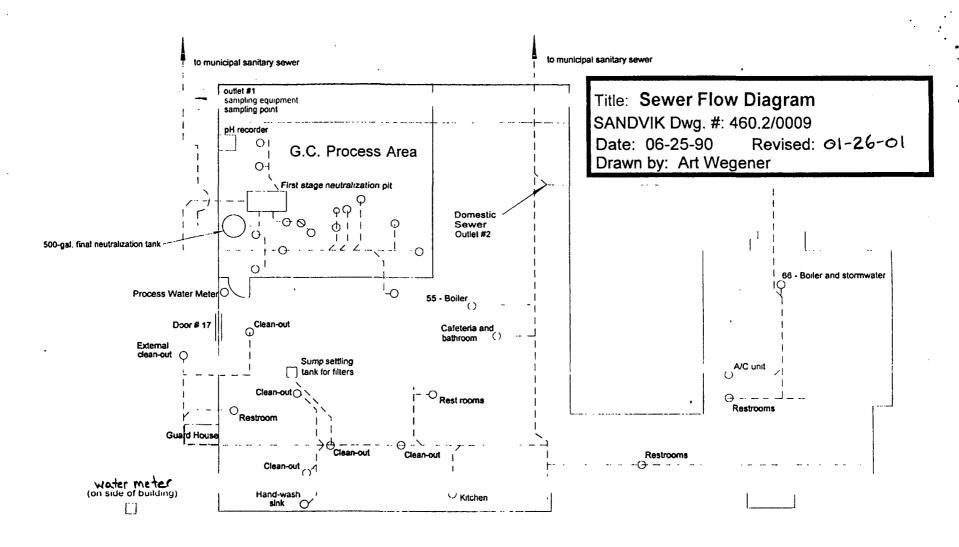
(To be completed by all applicants)

| PERMIT ("Perm | it"), as it appears on the cer ocument which establishes | ete name of the organization applying for a SEWER USE tificate of incorporation, charter, by-laws, partnership agreement the name of the applicants (if no such document exists, state the |
|---------------|---|--|
| | Sa | andrik, Inc. |
| | | of Applicant |
| | : Identify all trade names nich this Permit application | and/or fictitious names that the organization will utilize at the is made. |
| | | NIA |
| | Trade 1 | Name/Fictitious Name |
| BUSINESS ORG | GANIZATION: Please | check the appropriate box: |
| ū | Sole proprietorship | ☐ Trust |
| <u> </u> | Partnership | ☐ Joint Venture |
| ٥ | Limited Partnership | ☐ Non-Profit Corporation |
| × | Corporation | Limited Liability Company |
| (a) | Other (describe) | |
| | | |
| • | | |
| | CONTACT PERSON: If of the person(s) the PVSC | in the event of an emergency, provide the name, address and can contact: |
| | Name: Jouko | Tahvanainen / William Durow |
| | Street Address: 170 | Tahvanainen/William Durow 2 Nevins Rd |
| | | Fair Lawn, NJ 07410 |
| | Business Telephone: | (201) 794-5000 |
| | Emergency Telephone: (| |

SECTION FOUR

(This section to be completed only if the business concern is organized in a form other than a sole proprietorship, corporation, partnership or joint venture—such as a trust or association)

| FORM OF BUSINESS ORGAI under what legal authority it was ex | NIZATION: Describe how the business entity is organized and stablished. |
|---|---|
| | |
| | |
| | |
| | |
| | |
| (All a | CERTIFICATION applicants must sign and date the following certification) |
| | upplied in the foregoing SUPPLEMENTAL SEWER USE PERMIT E are true. I am aware that if any of the foregoing responses are willfully |
| alse, I am subject to punishment, | William Dusow |
| Dated: 1/26/01 | Signature |
| | Facility Engineer |
| | Print Title & Position |



Outlet Designation #:

Outlet # 1: 08401681-18055-001

SAN000104

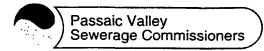
3,140,000.+
3,660,000.+
4,630,000.+
3,650,000.+
15,080,000.*

2,520,000.+
12,560,000.+
002
15,080,000.*

IRENE G. ALMEIDA CHAIRMAN

JAMES KRONE VICE CHAIRMAN

DANIEL F. BECHT, ESQ.
FRANK J. CALANDRIELLO
DOMINIC W. CUCCINELLO
PETER A. MURPHY
ANGELINA M. PASERCHIA
THOMAS J. POWELL
DONALD TUCKER
COMMISSIONERS



600 WILSON AVENUE NEWARK, N.J. 07105 (973) 344-1800 Fax: (973) 344-2951 www.pvsc.com ROBERT J. DAVENPORT EXECUTIVE DIRECTOR

PETER G. SHERIDAN CHIEF COUNSEL

> LOUIS LANZILLO CLERK

Industrial Fax: (973) 344-4876

RECEIPT FOR APPLICATION FEE

PERMIT FEE

| Received from: Sandvick |
|--|
| |
| Address: P. O BOX 428 fairlawn NJ. 07410 |
| Amount of Payment: #750,00 |
| |
| Date of Payment $2-2-0/$ |
| |
| |
| Payment Received by: |
| |
| Signature: Suits Kyf |
| () |
| Amount: |

CERTIFICAL OF INCORPORATION

OF

SANDVIK STEEL, INC.

We, the undersigned, in order to form a corporation for the purposes hereinafter stated, under and pursuant to the provisions of the General Corporation Law of the State of Delaware, do hereby certify as follows:

FIRST: The name of the corporation is SANDVIK STEEL, INC.

SECOND: The principal office of the corporation is to be located in the City of Wilmington, in the County of Newcastle, in the State of Delaware. The name of its resident agent is THE CORPORATION TRUST COMPANY, whose address is 100 West Tenth Street in said city.

THIRD: The nature of the business of the corporation and the objects or purposes proposed to be transacted, promoted or carried on by it are:

To manufacture, design, fabricate, import, buy, sell, export, deal in, and to engage in, conduct and carry on the business of manufacturing, designing, fabricating, importing, buying, selling, exporting and dealing in all kinds, forms and combinations of steel, iron or other metals, and in the products or by-products of steel, iron or other metals, including tools, saws, saw-frames, mainsprings, machinery, hardware articles and specialties, equipment and devices of every kind, nature and description and to transact a general steel and iron manufacturing, treating, fabricating and jobbing business.

To build and erect, or cause to be built and erected, and to operate furnaces, rolling mills, forges, foundries, pipe works and all machinery, fixtures, buildings, structures and appliances that may be necessary or desirable for the conduct of its business.

To manufacture, design, fabricate, import, buy, sell, export, deal in, and to engage in, conduct and carry on the business of manufacturing, designing, fabricating, importing, buying, selling, exporting and dealing in goods, wares and merchandise of every class and description necessary or useful for the operations of this corporation.

To improve, manage, develop, sell, assign, transfer, lease, mortgage, pledge, or otherwise dispose of or turn to account or deal with all or any part of the property of the

corporation and from time to time to vary any investment or employment of capital of the corporation.

To borrow money, and to make and issue notes, bonds, debentures, obligations and evidences of indebtedness of all kinds, whether secured by mortgage, pledge or otherwise, without limit as to amount, and to secure the same by mortgage, pledge or otherwise; and generally to make and perform agreements and contracts of every kind and description.

To the same extent as natural persons might or could do, to purchase or otherwise acquire, and to hold, own, maintain, work, develop, sell, lease, exchange, hire, convey, mortgage or otherwise dispose of and deal in, lands and lease-holds, and any interest, estate and rights in real property, and any personal or mixed property, and any franchises, rights, licenses or privileges necessary, convenient or appropriate for any of the purposes herein expressed.

To apply for, obtain, register, purchase, lease or otherwise to acquire and to hold, own, use, develop, operate and introduce, and to sell, assign, and grant licenses or territorial rights in respect to, or otherwise to turn to account or dispose of, any copyrights, trade-marks, trade names, brands, labels, patent rights, letters patent of the United States or of any other country or government, inventions, improvements and processes, whether used in connection with or secured under letters patent or otherwise.

To do all and everything necessary, suitable and proper for the accomplishment of any of the purposes or the attainment of any of the objects or the furtherance of any of the powers hereinbefore and forth, either along or in association with other corporations, firms or individuals, and to do every other act or acts, thing or things incidental or appurtenant to or growing out of or connected with the aforesaid business or powers or any part or parts thereof, provided the same be not inconsistent with the laws under which this corporation is organized.

To acquire by purchase, subscription or otherwise, and to hold for investment or otherwise and to use, sell, assign, transfer, mortgage, pledge or otherwise deal with or dispose of stocks, bonds or any other obligations or securities of any corporation or corporations; to merge or consolidate with any corporation in such manner as may be permitted by law; to aid in any manner any corporation whose stocks, bonds or other obligations are held or in any manner guaranteed by this corporation, or in which this corporation is in any way interested; and to do any other acts or things for the preservation, protection, improvement or enhancement of the value of

any such stock, bonds or other obligations; and while owner of any such stock, bonds or other obligations to exercise all the rights, powers and privileges of ownership thereof, and to exercise any and all voting powers thereon; to guarantee the payment of dividends upon any stock, or the principal or interest or both, of any bonds or other obligations, and the performance of any contracts.

The business or purpose of the corporation is from time to time to do any one or more of the acts and things here-inabove set forth, and it shall have power to conduct and carry on its said business, or any part thereof, and to have one or more offices, and to exercise any or all of its corporate powers and rights, in the State of Delaware, and in the various other states, territories, colonies and dependencies of the United States, in the District of Columbia, and in all or any foreign countries.

The enumeration herein of the objects and purposes of this corporation shall be construed as powers as well as objects and purposes and shall not be deemed to exclude by inference any powers, objects or purposes which this corporation is empowered to exercise, whether expressly by force of the laws of the State of Delaware now or hereafter in effect or impliedly by the reasonable construction of the said laws.

FOURTH: The total number of shares of stock which the corporation is authorized to issue is Twenty Thousand (20,000) shares with a par value of One Hundred Dollars (\$100) per share, amounting in the aggregate to Two Million Dollars (\$2,000,000.).

FIFTH: The minimum amount of capital with which the corporation will commence business is One Thousand Dollars (\$1,000).

SIXTH: The name and place of residence of each of the incorporators is as follows:

Name

Residence

O. Taft Nelson

43 Montgomery Place, Brooklyn, N.Y.

John F. B. Mitchell

1088 Park Avenue, New York, N.Y.

Gerald P. Lepp

4 Washington Square Villags, New York, N. Y.

SEVENTH: The corporation is to have perpetual existence.

EIGHTH: The private property of the stockholders shall not be subject to the payment of corporate debts to any extent whatever.

NINTH: The following provisions are inserted for the management of the business and for the conduct of the affairs of this corporation, and for further definition, limitation and regulation of the powers of this corporation and of its directors and stockholders:

- (1) The number of directors of the corporation shall be such as from time to time shall be fixed by, or in the manner provided in the by-laws, but shall not be less than three. Election of directors need not be by ballot unless the by-laws so provide.
 - (2) The board of directors shall have power
 - (a) Without the assent or vote of the stockholders, to make, alter, amend, change, add to, or repeal the by-laws of this corporation; to fix and vary the amount to be reserved for any proper purpose; to authorize and cause to be executed mortgages and liens upon any part of the property of the corporation provided it be less than substantially all; to determine the use and disposition of any surplus or net profits, and to fix the times for the declaration and payment of dividends.
 - (b) To determine from time to time whether, and to what extent, and at what times and places, and under what conditions and regulations, the accounts and books of the corporation (other than the stock ledger) or any of them, shall be open to the inspection of the stockholders.
- any contract or act for approval or ratification at any annual meeting of the stockholders or at any meeting of the stockholders or at any meeting of the stockholders called for the purpose of considering any such act or contract, and any contract or act that shall be approved or be ratified by the vote of the holders of a majority of the stock of the corporation which is represented in person or by proxy at such meeting and entitled to vote thereat (provided that a lawful quorum of stockholders be there represented in person or by proxy) shall be id and as binding upon the corporation and upon all the colders, as though it had been approved or ratified stockholder of the corporation, whether or not the colders act would otherwise be open to legal attack because of directors interest, or for any other reason.

(4) In addition to the powers and authorities hereinbefore or by statute expressly conferred upon them, the
directors are hereby empowered to exercise all such powers and
do all such acts and things as may be exercised or done by the
corporation; subject, nevertheless, to the provisions of the
statutes of Delaware, of this certificate, and to any by-laws
from time to time made by the stockholders; provided, however,
that no by-law so made shall invalidate any prior act of the
directors which would have been valid if such by-law had not
been made.

TENTH: No contract or other transaction between the corporation and any other corporation shall be affected or invalidated by the fact that any one or more of the directors of this corporation is or are interested in, or is a director or officer, or are directors or officers of such other corporation, and any director or directors, individually or jointly may be a party or parties to or may be interested in any contract or transaction of this corporation or in which this corporation is interested; and no contract, act or transaction of this corporation with any person or persons, firm or association, shall be affected or invalidated by the fact that any director or directors of this corporation is a party, or are parties to, or interested in, such contract, act or transaction, or in any way connected with such person or persons, firm or association, and each and every person who may become a director of this corporation is hereby relieved from any liability that might otherwise exist from contracting with the corporation for the benefit of himself or any firm or corporation in which he may be in anywise interested.

ELEVENTH: Any person made a party to any action, suit or proceeding by reason of the fact that he, his testator or intestate, is or was a director, officer or employee of this corporation or of any corporation which he served as such at the request of this corporation, shall be indemnified by the corporation against the reasonable expenses, including attorneys' fees, actually and necessarily incurred by him in connection with the defense of such action, suit or proceeding, or in connection with any appeal therein, except in relation to matters as to which it shall be adjudged in such action, suit or proceeding that such officer, director or employee is liable for negligence or misconduct in the performance of his duties. Such right of indemnification shall not be deemed exclusive of any other rights to which such director, officer of employee may be entitled by law.

TWELFTH: The Corporation reserves the right to amend, alter, change or repeal any provision contained in this

certificate of incorporation in the manner now or hereafter prescribed by law, and all rights and powers conferred herein on stockholders, directors and officers are subject to this reserved power.

IN WITNESS WHEREOF, we have hereunto set our hands and seals, the 14th day of February, 1963.

| In the presence of: | S/ 0. Taft Nelson (L.S | •) |
|---------------------|-----------------------------|-----|
| THE TAKE DOOR | S/ John F. B. Mitchell (L.S | •) |
| EVELYN BROC | S/ Gerald P. Lepp (L.S | .) |
| | | • |

STATE OF NEW YORK) : SS.:

Be It Remembered that on this 14th day of February A. D., 1963, personally came before me Robert M. Atkinson, a Notary Public in and for the County and State aforesaid, O. Taft Nelson, John F. B. Mitchell and Gerald P. Lepp, parties to the foregoing certificate of incorporation, known to me personally to be such, and severally acknowledged the said certificate to be the act and deed of the signers respectively, and that the facts therein stated are truly set forth.

Given under my hand and seal of office the day and year aforesaid.

S/ Robert M. Atkinson

(NOTARIAL SEAL)

ROBERT M. ATKINSON NOTARY PUBLIC State of New York ROBERT M. ATKINSON
Notary Public, State of New York
No. 31-0108540
Qualified in New York County
Commission expires March 31,1963

| | | affixed our hands and the co | The second secon |
|-------------------------------|---|------------------------------|--|
| tion this_ | 20 day | of February | 19.63 |
| | | It follow | |
| (SEAL) | Jan. | 11 /36 | President |
| | /llra | a i. ngg | Secretary |
| and Marian Marian Marian | | | |
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| Section 1 | | | 1976 (1) 1976 (1) 1986 (1) 1986 (1) |
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| . : | | | |

STATEMENT

BY THE more merchanism and a series of the series of The second of th SANDVIK STEEL, INC. and the second s peter with provide THE BUTTON OF THE was at service in the 1500 The Company above named, a corporation organized under the laws of the State of DELAWARE does hereby, pursuant to the provisions of Section 14:15-3 of the Revised Statutes of New Jersey, and the acts amendatory thereof and supplemental thereto, make the following statement and designation: First. The total amount of the authorized Capital stock of said corporation is Par value Without par value , 2,000,000 _Shares The amount actually issued is Per value Without par value , 1,000 Second. The character of the business which the said corporation is to transact in the State of New lener is a general steel and iron importing, jobbing, creating, fabricating and manufacturing business and as provided in its certificate of incorporation, a copy of which, attested by its President and Secretary under its corporate seal, is hereto affixed as part hereof. Third. The principal office in New Jersey is at No. 15 Exchange Place, Jersey City, and THE CORPORATION TRUST COMPANY is hereby designated as the agent upon whom process against this corporation may be served. In Testimony. Whereof, the said corporation hath caused its corporate seal to be hereto affixed, and these presents to be signed by its Secretary, the 24 attested to by its day of February SANDVIK STEEL, INC. (ડેંટથી) By C De bellow President. Attest: SAN000230 PORM 6-114 99-81-61-10M



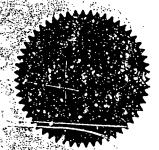
** Departmentors as

I, the Tecretary of Stair of the State of New Jersey & Da hereby Certify that SANDVIX STEEL, INC.

_, no Confirmation

organized under the laws of the State of DELATARE

have complied with all the requirements of Title 14: Chapter 15, Foreign Corporations of the Revised Statutes of New Jossey, and that the Ausiness of said corporation to be carried on within the State of New Jersey is such as may be lawfully carried on by corporations incorporated and rether laws of this State for similar business.



In Testimong Milerent, I have horowater set my hand and affired my Official Scal at Tronton this Pourth day of March & D14 03.

Gerelary of State

| TEX | SANDVIK STEEL, UNC. | | | |
|-------|---------------------|--|--|--|
| | | | | |
| | of the State of | | | |
| | DELAWARE | | | |
| Filed | | | | |
| | | | | |
| • | Secretary of State | | | |

FILED AND RECORDED ,
1963
Cobat Medicalis.

RECORDING

CERTIFICIAG COPY

CORPORATION TRUST COMPANY 123 Broadway, New York City N. Y.

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207807

APPLICATION FOR AN AMENDED

| Ta Kijor a Wheten the under setting the TADITITAD a Annih and to be to b |
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| |
| SANDVIK, INC. 2012 8 YEM lovel |
| (For Use by Foreign Corporations Only) |
| To: The Secretary of State (State Company) |
| State of New Jersey |
| Pursuant to the provisions of Section 14A:13-6, Corporations, General, of the |
| New Jersey Statutes, the undersigned corporation hereby applies for an Amended Certifi- |
| cate of Authority, and for this purpose submits the following Application: |
| 1. The name of the corporation is SANDVIK, INC. |
| (formerly: SANDVIK STEEL, INC.) |
| 2. It is incorporated under the laws of |
| 3. The date of its incorporation is February 15; 1963 of the ATOX |
| 4. The period of its duration is Perpetual |
| 5. The address of the main business or headquerters office of the corporation is: |
| 1702 Nevins Road, Fair Lawn, N. J. zip Code 07410 |
| |
| 6. The address of the registered office of the corporation in New Jersey is |
| 15 Exchange Place, Jersey City, New Jersey 07302 |
| and the name of its registered agent at such address is |
| THE CORPORATION TRUST COMPANY |
| Said registered agent is an agent of the corporation upon whom process against the S |
| poration may be served. |
| 7. The business which the corporation is authorized to transact in New Jersey. |
| ch it is also authorized to transact in its jurisdiction of incorporation, is as follows: |
| importation, Manufacture, Distribution and Sale of Products made from Metal and Alloys. |
| |
| 8. Attached to this Application is a certificate attesting to the fact that the cor- |

poration is in good standing under the laws of the jurisdiction of its incorporation

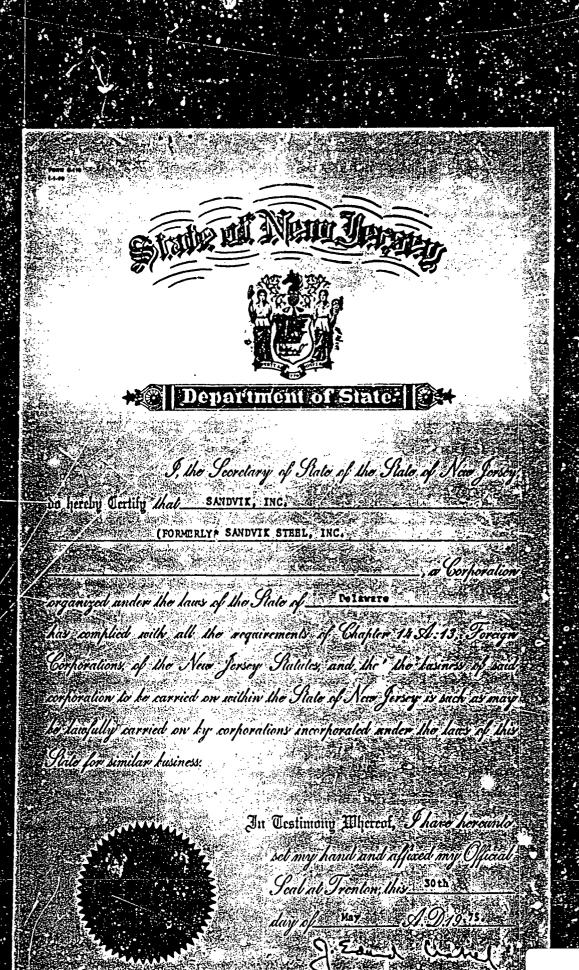
of the filing of this application.

cuted by the proper official thereof and dated not earlier than 30 days prior to the date

SAN000233

In Witness Whereof, the undersighted corputation has causpaid a Application to be ex

SAN000234



SAN000235

Societary of State



State of DELAWARE

Office of SECRETARY OF STATE

I. Robert H. Reed, Scoretary of State of the State of Delaware

do hereby certify that the "SANDVIK STEEL, INC.", filed a Certificate of Amendment, changing its corporate title to "SANDVIK, INC.", on the seventh day of May, A.D. 1975, at 10 o'clock A.M.

And I do hereby further certify that the aforesaid Corporation is duly incorporated under the laws of the State of Delaware and is in good standing and has a legal corporate existence so far as the records of this office show and is duly authorized to transact business.

In Testimony Whereof, I have hereunto set my hand and official scal at Dover this seventh day, and official scal at Dover this in the year of our Linds one thousand nine hundred and seventy-five.

Robert H. Roed
SAN000236

A DILLIA CONTRACTOR CO

SECRETARY OF STATE DOVER DELAWARE MAY 30 1975

SECRETARY OF STATE

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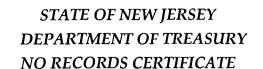
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SEC. OF STATE

C. OF STATE \$30:00

C.T CORPORATION SYSTEM MR. J. L. RIVERAS 28 W. STATE STREET TREATUN, N. J. C8608



I, the Treasurer of the State of New Jersey, do hereby certify that at the time of the issuance of this certificate

SANDVIK COROMANT, INC.

does not appear on the records of this office.



IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal at Trenton, this 30th day of August, 2007

Bradley Abelow
State Treasurer

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Sandvik Annual Report 2006

Global growth and strong earnings trend

- Order intake SEK 77,708 M, up 16% from the preceeding year for comparable units, excluding currency effects.
- Net profit for the period +27%, SEK 8,107 M.
- Earnings per share +30%, SEK 6.45.
- Proposal for increased dividend of SEK 3.25 (2.70) and an extra distribution of SEK 3.00 per share.

Sandvik had another strong year in 2006. Sales reached SEK 72 billion following growth of 14% during the year. Profit after financial items increased by 26% to SEK 11 billion. The Group's financial targets were reached or exceeded. For the past two years, organic growth has averaged 14% per year, while the return on capital employed was 26%.

STRONG INDUSTRIAL ECONOMY

During the year, global industrial activity was high in all customer segments. The trend was strong in the engineering sector, the mining and construction sector, oil and gas extraction and energy production, to name just a few key areas. The rapid economic growth in China, India and Russia continued, and the change in demand is structural rather than cyclical. It is pleasing to note that European growth also increased gradually.

ACQUISITIONS

Company acquisitions are a key element of Sandvik's strategy for profitable growth. During the most recent ten-year period, we have acquired nearly 50 companies with operations that lie within Sandvik's areas of expertise and complement and strengthen the Group's position within a product, application or geographic area. One example of this strategy is the acquisitions of four companies involved in mineral exploration by the Sandvik Mining and Construction business area during 2006. Combined, the acquired companies form a new customer segment – Mineral Exploration – with high growth potential.

SUCCESSFUL BUSINESS AREAS

For the Sandvik Tooling business area, the favorable trend continued during 2006. Strong global demand combined with successful introductions of new products further strengthened Sandvik Tooling's leading position in metal cutting. Both sales and earnings increased, and the brand strategy, based on differentiated customer offerings, continued to be successful. Substantial investments were made in improved production technology and increased capacity. At the same time, work continued to consolidate the units and integrate them in a global technology platform to further increase flexibility in production and logistics.

For Sandvik Mining and Construction, 2006 was also a successful year. The sharply increasing demand for metals was a key factor for market growth. A large number of new products were launched, and customers' needs for mechanization and a higher degree of automation, as well as service, contributed strongly to the high growth rate. Sandvik Mining and Construction has the market's most extensive product range, with a focus on underground mining, so that customers can be offered an ever-increasing range of total solutions. This intensified focus on system sales and service is a key driving force for future growth.

Within Sandvik Materials Technology, the extensive program of change continued to further increase profitability, which entails a change of product mix toward more refined and specialized products. This will be achieved through a large number of new product launches. Other effects of the program of change are increased

Earnings, returns and financial position

EARNINGS AND RETURNS

Operating profit amounted to SEK 12,068 M (9,532), up 27% compared with the preceding year.

Higher sales and production volumes, a better product mix as well as the effects of rationalization efforts had a positive effect on earnings. Changes in foreign exchange rates compared to 2005 also positively affected the operating profit by some SEK 195 M.

Allocation to the profit-sharing fund for employees in wholly owned Swedish companies totaled SEK 150 M (150).

The net financing cost was SEK 955 M (713). The poorer outcome compared with the preceding year was mainly caused by higher average indebtedness and higher interest rates. Net financing cost was positively affected by SEK 102 M (171) as a consequence of the measurement of equity related derivative instruments at fair value. Profit after financial income and expenses reached SEK 11,113 M (8,819).

Income tax expense was SEK 3,006 M (2,427), or 27% (28) of profit before taxes.

The profit for the year attributable to equity holders of the Parent Company was SEK 7,701 M (6,021). Earnings per share amounted to SEK 6.45 (4.95).

Return on capital employed was 27.6% (23.7) and return on equity was 31.8% (27.4).

FINANCIAL POSITION

Cash-flow from operating activities amounted to SEK 8,170 M (7,266). Cash-flow after investments, acquisitions and divestments was SEK 2,846 M (3,582). At the end of the year, cash and cash equivalents amounted to SEK 1,745 M (1,559). Interest-bearing provisions and liabilities less cash and cash equivalents yielded a net debt of SEK 16,811 M (16,653).

Sandvik has a credit facility of EUR 1,000 M expiring in 2013. This facility, which is the Group's primary liquidity reserve, was unutilized at the end of the year. Under the Swedish bond program of SEK 5,451 M, bonds in the amount of SEK 3,842 M are outstanding. In addition, there are bonds issued in the US amounting to USD 300 M maturing over 11 and 14 years.

The international credit-rating institute Standard & Poors has an A+ rating for Sandvik's long-term borrowings, and A-1 for short-term borrowings.

WORKING CAPITAL

During the year, the work carried out internally to improve capital efficiency continued resulting in a reduction of the amount of tied-up capital relative to invoiced sales.

Working capital at the end of the year amounted to SEK 21,352 M (19,623), which was 27% (27) relative to invoiced sales.

The carrying value of inventories at the end of the year was SEK 18,738 M (16,440), or 24% (23) relative to invoiced sales.

Earnings and returns

| | 2006 | 2005 |
|---|--------|-------|
| Operating profit, SEK M | 12 068 | 9 532 |
| as a percentage of involced sales, % | 16.7 | 15.0 |
| Profit after financial income and expenses, SEK M | 11 113 | 8 819 |
| as a percentage of invoiced sales, % | 15.4 | 13.9 |
| Return on capital employed, % | 27.6 | 23.7 |
| Return on equity, % | 31.8 | 27.4 |
| Basic earnings per share, SEK | 6.45 | 4.95 |
| Diluted earnings per share, SEK | 6.45 | 4.90 |

Definitions, page 50.

Quarterly trend of profit after net financial items

| | | Invoiced sales SEK M | Profit after financial items SEK M | Net margin |
|------|-------------|-------------------------|--|------------|
| 2005 | 1st Quarter | 14 194 | 1 892 | 13 |
| | 2nd Quarter | 16 150 | 2 235 | 14 |
| | 3rd Quarter | 15 554 | 2 126 | 14 |
| | 4th Quarter | 17 473 | 2 566 | 15 |
| 2006 | 1st Quarter | 17 481 | 2 684 | 15 |
| | 2nd Quarter | 17 851 | 2 695 | 15 |
| | 3rd Quarter | 17 587 | 2 583 | 15 |
| | 4th Quarter | 19 370 | 3 151 | 16 |

Financial position

| | 2006 | 2005 |
|--|--------|--------|
| Cash-flow from operating activities, SEK M | 8 170 | 7 266 |
| Cash-flow after investments, acquisitions and divestments, SEK M | 2 846 | 3 582 |
| Cash and cash equivalents at 31 December, SEK M | 1 745 | 1 559 |
| Net debt, 31 December, SEK M | 16 811 | 16 653 |
| Net financial Items, SEK M | -955 | -713 |
| Equity ratio, % | 41 | 41 |
| Net debt/equity ratio, times | 0.6 | 0.7 |
| Equity, 31 December, SEK M | 27 198 | 24 507 |
| Equity per share, 31 December, SEK | 22.00 | 19.80 |

Definitions, page 50.

NOTE 15. SHARES IN GROUP COMPANIES (cont.)

Sandvik AB's holdings of shares and participations in subsidiaries Indirect holdings in operating Group companies

| Group holding, % | | 20061) | 2005 1) | Group holding, % | | 20061) | |
|------------------|---|------------------|------------|-------------------------|--|------------|------------|
| SWEDEN | Kanthal AB | 100 | 100 | ITALY (cont.) | Sandvik Italia S.p.A. | 100 | 100 |
| | Kanthal Norden AB | 100 | 100 | | Walter USAP S.R.L. | 100 | 100 |
| | Roson AB | 100 | 100 | JAPAN | Sandvik Sorting Systems K.K. | 100 | 100 |
| | Sandvik Invest AB | 100 | 100 | | Sandvik Toyo Co. Ltd. | 100 | 100 |
| | Sandvik SRP AB | 100 | 100 | KAZAKHSTAN | Tamservice Ltd. | 100 | 100 |
| | Sandvík SRP (Arbrá) AB | 100 | 100 | KOREA | Sandvik Suhjun Ltd. | 70 | 70 |
| | Sandvík Treasury AB | 100 | 100 | | Walter Korea Ltd. | 100 | 100 |
| | Seco Tools AB | 60 ²⁾ | 60 2) | MALAYSIA | Sandvik Malaysia Sdn. Bhd. | 100 | 100 |
| ARGENTINA | Sandvík Argentína S.A. | 100 | 100 | | Sandvik Malaysia Wood Technology Sdn. Bhd. | 100 | 100 |
| AUSTRALIA | Sandvik Australia Pty. Ltd. | 100 | 100 | | Sandvik Mining and Construction | | |
| | Sandvik Materials Handling Pty. Ltd. | 100 | 100 | | (Malaysia) Sdn. Bhd. | 100 | 100 |
| | Sandvik Mining and Construction | | | MEXICO | Sandvík de México S.A. de C.V. | 100 | 100 |
| | Adelaide Pty. Ltd. | 100 | <i>-</i> | | Sandvik Mining and Construction | 400 | 400 |
| | Sandvik Mining and Construction Pty. Ltd. | | | | de México S.A. de C.V. | 100 | 100 |
| | Australia | 100 | 100 | NUTTO LETTE A NUTSC | Valenite de Mexico S.A. de C.V. | 100 | 100 |
| | Sandvik Rotary Tools Australia Pty. Ltd. | 100 | 100 | NETHERLANDS | Sandvik Benelux B.V. | 100 | 100 |
| | Walter Australia Pty. Ltd. | 100 | 100 | NIDA/ TEAL AND | Sandvik DC Venio B.V. | 100 | 100 |
| | Voest Alpine Mining and Tunnelling Pty. Ltd. | 100 | 100 | NEW ZEALAND | Sandvik New Zealand Ltd. | 100 | 100 |
| AUSTRIA | Montanwerke Walter Ges.m.b.H. | 100 | 100 | | Walter New Zealand Ltd. | 100 | 100 |
| | Sandvik BPI Bohrtechnik GmbH & Co. KG | 100 | 100 | NIGERIA | Sandvik Mining and Construction Nigeria Ltd. | 100 | 100 |
| | Sandvik in Austria Ges.m.b.H. | 100 | 100 | NORWAY | Sandvik Gram A/S | 100 100 | 100 100 |
| | Voest Alpine Bergtechnik Ges.m.b.H. | 100 | 100 | | Sandvik Norge A/S | | |
| | Voest Alpine Materials Handling | | | DED: 1 | Sandvik Tamrock A/S | 100 | 100 |
| | GmbH & Co. KG | 100 | 100 | PERU | Sandvik del Peru S.A. | 100 | 100 |
| BLGIUM | Walter Benelux N.V./S.A. | 100 | 100 | PHILIPPINES | Sandvik Philippines Inc. | 100 | 100 |
| BRAZIL | Sandvik Alpen Ferramentas S.A. | 100 | 100 | DOLAND. | Sandvik Tamrock (Philippines) Inc. | 100 | 100 |
| | Sandvik MGS S.A. | 51 | 51 | POLAND | Sandvik Mining and Construction Sp.z o.o. | 100 | 100 |
| | Sandvik Mining and Construction do Brasil SA | 100 | 100 | DOMAN"A | Walter Polska Sp.z o.o. | 100 | 100 |
| ***** | Walter do Brasil Ltda. | 100 | 100 | ROMANIA | Sandvík SRL Rustamservis Ltd. | 100 | 100 |
| ANADA | Dormer Tools Inc. | 100 | 100 | Russia | | 100 | 100 |
| | Hagby Canada Inc. | 100 | | CCDDIA | Sandvik-MKTC OAO | 98 | 98 |
| | Sandvík Canada Inc. | 100 | 100 | SERBIA- | Control Control Management of a c | 100 | *** |
| | Sandvik Mining and Construction Canada Inc. | 100 | 100 | MONTENEGRO SINGAPORE | Sandvik Serbia/Montenegro d.o.o. | 100 | 100 100 |
| | SDS Digger Tools Canada Inc. | 100 | 400 | SINGAPORE | Kanthal Electroheat (SEA) Pte. Ltd. | 100 | 100 |
| 51 III F | Valenite-Modco Ltd. | 100 | 100 | | Sandvik Mining and Construction S.E. Asia Pte. Ltd. | 100 | 100 |
| CHILE | Sandvik Chile S.A. | 100 | 100 | | | 100 100 | 100 |
| TLUS I A | UDR Chile | 100 | 100 | | Sandvik South East Asia Pte, Ltd. | 100. | 100 |
| CHINA | Sandvik Steel (Qingdao) Ltd. | 100 100 | 100 | SLOVENIA | Walter AG Singapore Pte. Ltd. | 100 | 100 |
| | Walter Wuxi Co. Ltd. | | | | Sandvik d.o.o. | | 100 |
| COCATIA | VAMT (Boatou) Co. Ltd. | 100 | 100 100 | SOUTH AFRICA | Sandvik Mining and Construction RSA (Pty) Ltd | | 100 |
| CROATIA | Sandvík, za trgovinu d.o.o. | 100 | 100 | | Sandvik (Pty) Ltd. Sandvik Romey Tooks South Africa (Pty) Ltd. | 100 100 | 100 |
| ZECH REPUBLIC | Sandvik Chomutov Precision Tubes s.r.o. | 100 | | | Sandvik Rotary Tools South Africa (Pty) Ltd. | 100 | 100 |
| SENIMARY | Walter CZ s.r.o. | 100 100 | 100 100 | SPAIN | Voest Alpine Mining & Tunneling (Pty) Ltd. | 100 | 100 |
| DENMARK | Sandvik A/S | 100 | 100 | 217014 | Safety iberica Metal Duro S.A. | 100 | 100 |
| FINLAND | Room Oy | | 100 | | Sandvik Española S.A. Walter Tecno UTIL S.A. | 100 | 100 |
| | Sandvik Mining and Construction Finland Corp. Sandvik Tamrock Corp. | 100 | 100 | SWITZERLAND | Sandvík AG | 100 | 100 |
| RANCE | Gunther Tools S.A.S. | 100 | 100 | 31111200010 | Sansafe AG | 100 | 100 |
| 10 0102 | Safety Production S.A.S. | 100 | 100 | | Santrade Ltd. | 100 | 100 |
| | Safety S.A.S. | 100 | 100 | | Walter (Schweiz) AG | 100 | 100 |
| | Sandvik CFBK S.A.S. | 100 | 100 | TAIWAN | Sandvík Hard Materials Taiwan Pty. Ltd. | 100 | 100 |
| | Sandvik Hard Materials France | 100 | 100 | 17011741 | Sandvik Taiwan Ltd. | 100 | 100 |
| | Sandvik Mining and Construction Lyon S.A.S. | 100 | 100 | | Walter Taiwan Ltd. | 100 | 100 |
| | Sandvik S.A.S. | 100 | 100 | TANZANIA | Sandvik Mining and Construction Tanzania Ltd. | | 100 |
| | Sandvik Tamrock Secoma S.A.S. | 100 | 100 | THAILAND | Sandvik Thailand Ltd. | 100 | 100 |
| | Sandvik Tobler S.A.S. | 100 | 100 | 1100000 | Walter (Thailand) Co. Ltd. | 100 | 100 |
| | Walter France Eurl | 100 | 100 | UK | Dormer Tools Ltd. | 100 | 100 |
| SERMANY | Alpine Westfalia GmbH | 100 | 100 | J., | Dormer Tools (Sheffield) Ltd. | 100 | 100 |
| | Gurtec GmbH | 100 | 100 | | Kanthal Ltd. | 100 | 100 |
| | Günther & Co. GmbH | 100 | 100 | | Prototyp UK Ltd. | 100 | 100 |
| | J&M Mining Supply GmbH | 100 | 100 | | Safety Cutting Tools UK Ltd. | 100 | 100 |
| | Prototyp-Werke GmbH | 100 | 100 | | Sandvik Ltd. | 100 | 100 |
| | Safety Deutschland GmbH | 100 | 100 | | Sandvik Mining and Construction Ltd. | 100 | 100 |
| | Sandvik Customer Finanding Europe GmbH | 100 | 100 | | Sandvik Osprey Ltd. | 100 | 100 |
| | Sandvik Mining and Construction | 100 | 100 | | Titex Tools Ltd. | 100 | 100 |
| | Central Europe GmbH | 100 | 100 | | Walter GB Ltd. | 100 | 100 |
| | Sandvik Shared Services GmbH | 100 | 100 | UKRAINA | Sandvik Ukraine | 100 | 100 |
| | TDM Systems GmbH | 75 | 50 | US | Dormer Tools LLC | 100 | 100 |
| | Walter AG | 100 | 100 | 03 | | | |
| | Walter Hartmetall GmbH | 100 | 100 | | Kanthal Corp. MRL Industries Inc. | 100 | 100 |
| | Werner Schmitt PKD-Werkzeug AG | 100 | 100 | | Pennsylvania Extruded Tube Co. | 100 70 | 100 70 |
| HANA | | 100 | 100 | | Predsion Twist Drill Co. | 100 | |
| IONG KONG | Sandvik Mining and Construction Ghana Ltd. Kanthal Electropheet bilk lied | | 100 | | Sandvik Inc. | | 100 |
| IONG KONG | Kanthal Electroheat Hk Ltd. | 100 | | | | 100 | 100 |
| | Sandvik Hongkong Ltd. | 100 | 100 | | Sandvik Mining and Construction USA LLC | 100 | 100 |
| II INICAOY | Sandvik Tamrock (Far East) Ltd. | 100 | 100 | | Sandvik Process Systems LLC | 100 | 100 |
| IUNGARY | Walter Hungaria Kft. | 100 | 100 | | Sandvik Sorting Systems LLC | 100 | 100 |
| NDIA | Sandvik Mining and Construction Tools India Ltd | | 97 | | Sandvik Special Metals LLC | 100 | 100 |
| ID ON IET | Walter India Tools and Machines Pvt. Ltd. | 100 | 100 | | Sandvik Treasury NAFTA LLC | 100 | 100 |
| NDONESIA | PT Sandvik Indonesia | 100 | 100 | | Technical Tooling Inc. | 100 | 100 |
| | PT Sandvik SMC | 100 | 100 | | Valenite US | 100 | 100 |
| | | | | | | 4 | 400 |
| RELAND TALY | Sandvik Ireland Ltd. Dormer Italia S.p.A. | 100 100 | 100 100 | ZAMBIA | Walter USA Inc. Sandvik Mining and Construction Zambia Ltd. | 100 100 | 100 100 |

Unless otherwise stated, ownership percentage percents to share of capital, which also corresponds to share of voting rights.
 Share of voting rights, 99% (89).

Financial key figures

KEY FIGURES (IFRS based from 2004, earlier years in accordance with previous GAAP.)

| | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 | 1999 | 1998 | 1997 |
|---|--------|----------------------|----------------------|--------|--------|--------|--------|--------------------|--------|----------------------|
| Invoiced sales, SEK M | 72 289 | 63 370 | 54 610 | 48 810 | 48 700 | 48 900 | 43 750 | 39 300 | 42 400 | 34 119 |
| Change, % | +14 | +16 | +12 | 0 | 0 | +12 | +11 | -7 | +24 | +21 |
| of which organic, % | +14 | +14 | +15 | +5 | -7 | +3 | +12 | -8 | +1 | +4 |
| of which structural, % | +1 | -1 | -1 | +2 | +10 | +1 | 4 | -1 | +22 | +10 |
| of which currency, % | -1 | +3 | -2 | -7 | -3 | +8 | +3 | +2 | +1 | +6 |
| Operating profit, SEK M | 12 068 | 9 532 | 7 578 | 4 967 | 5 771 | 6 103 | 6 327 | 4 425 | 4 595 | 4 370 |
| as % of invoicing | 17 | 15 | 14 | 10 | 12 | 12 | 14 | 11 | 11 | 13 |
| Profit after financial items, SEK M | 11 113 | 8 919 | 6 977 | 4 187 | 5 063 | 5 606 | 5 804 | 5 46 5 | 3 935 | 4 205 |
| as % of invoicing | 15 | 14 | 13 | 9 | 10 | 11 | 13 | 14 | 9 | 12 |
| Consolidated net profit for the year, SEK M | 8 107 | 6 392 | 5 111 | 2 788 | 3 436 | 3 688 | 3 712 | 3 620 | 2 095 | 2 725 |
| Shareholders' equity, SEK M | 27 198 | 24 507 ¹⁾ | 23 551 ¹⁾ | 21 440 | 23 205 | 23 972 | 23 019 | 20 109 | 18 621 | 17 414 |
| Equity/Assets ratio, % | 41 | 41 | 46 | 46 | 48 | 50 | 55 | 52 | 47 | 47 |
| Net debt/equity ratio, multiple | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 |
| Rate of capital turnover, % | 115 | 112 | 108 | 98 | 97 | 102 | 104 | 95 | 104 | 96 |
| Cash and cash equivalents, SEK M | 1 745 | 1 559 | 1 720 | 1 972 | 2 175 | 2 258 | 2 097 | 2 369 | 1 800 | 2 494 |
| Return on shareholders' equity, % | 31.8 | 27.4 | 21.7 | 12.8 | 14.9 | 15.5 | 17.3 | 12.42) | 11.9 | 14.3 |
| Return on capital employed, % | 27.6 | 23.7 | 20.5 | 13.4 | 15.4 | 17.4 | 20.3 | 15.1 ²⁾ | 16.3 | 17.7 |
| Investments in property, plant and equipment, SEK M | 4 801 | 3 665 | 2 967 | 3 153 | 2 357 | 2 627 | 2 087 | 1 875 | 2 811 | 2 353 |
| Total investments, SEK M | 6 081 | 3 950 | 3 278 | 3 260 | 5 066 | 4 083 | 2 670 | 2 233 | 3 202 | 6 644 |
| Cash flow from operations, SEK M | 8 170 | 7 266 | 5 322 | 6 421 | 7 190 | 5 093 | 4 476 | 3 394 | 3 919 | 4 984 3) |
| Cash flow, SEK M | 357 | -380 | -207 | -104 | 48 | 73 | -334 | 577 | -791 | -2 035 ³⁾ |
| Number of employees, 31 December | 41 743 | 39 613 | 38 421 | 36 930 | 37 388 | 34 848 | 34 742 | 33 870 | 37 520 | 38 406 |

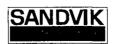
PER-SHARE DATA, SEK

(From 2004 in accordance with IFRS. Earlier years in accordance with previous GAAP. All historical figures are adjusted taking into account the 5:1 split.)

| | | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 | 1999 | 1998 | 1997 |
|---|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Basic earnings ¹⁾ | | 6.45 | 4.95 | 3.85 | 2.20 | 2.70 | 2.85 | 2.85 | 2.80 | 1.60 | 2.00 |
| Diluted earnings ²⁾ | | 6.45 | 4.90 | 3.75 | 2.15 | 2.70 | 2.85 | 2.80 | 2.75 | 1.60 | |
| Equity | | 22.00 | 19.80 | 18.30 | 17.20 | 18.60 | 19.10 | 17.80 | 15.50 | 14.40 | 13.50 |
| Dividend (2006 as proposed) | | 3.25 | 2.70 | 2.20 | 2.10 | 2.00 | 1.90 | 1.80 | 1.60 | 1.40 | 1.40 |
| Direct return3), % | | 3.3 | 3.6 | 4.1 | 4.2 | 5.2 | 4.2 | 4.0 | 3.0 | 5.0 | 3.1 |
| Payout percentage ⁴⁾ , % | | 50 | 55 | 57 | 94 | 73 | 66 | 63 | 57 | 86 | 69 |
| Quoted prices, Sandvik share, | highest | 106.00 | 79 | 56 | 50 | 52 | 49 | 62 | 56 | 50 | 54 |
| | lowest | 70.50 | 54 | 46 | 35 | 38 | 35 | 36 | 27 | 27 | 36 |
| | year-end | 99.50 | 74 | 54 | 50 | 39 | 45 | 45 | 54 | 28 | 45 |
| No. of shares at year-end, million | | 1 186.3 | 1 186.3 | 1 235.2 | 1 250.1 | 1 250.1 | 1 255.1 | 1 293.5 | 1 293.5 | 1 293.5 | 1 293.5 |
| Average no. of shares, million | | 1 186.3 | 1 216.9 | 1 255.8 | 1 250.1 | 1 252.5 | 1 277.6 | 1 293.5 | 1 293.5 | 1 293.5 | 1 343.0 |
| P/E ratio ⁵⁾ | | 15.4 | 15.0 | 13.9 | 22.1 | 14.2 | 15.6 | 15.9 | 19.1 | 17.4 | 22.3 |
| Quoted price, % of equity ⁶⁾ | | 452 | 374 | 293 | 288 | 209 | 235 | 255 | 344 | 196 | 336 |

DEVELOPMENT BY BUSINESS AREA

| | INVOICED SALES | | | OPERATING PROFIT AND OPERATING MARGII | | | | | | | |
|---------------------------------|----------------|--------|--------|---------------------------------------|----|-----------|----|-------|----|------|--|
| | 2006 | 2005 | 2004 | 2006 | | 2006 2005 | | 2005 | | 2004 | |
| | SEK M | SEK M | SEK M | SEK M | % | SEK M | % | SEK M | % | | |
| Sandvik Tooling | 22 477 | 20 847 | 19 227 | 5 191 | 23 | 4 420 | 21 | 3 864 | 20 | | |
| Sandvik Mining and Construction | 25 001 | 20 560 | 16 617 | 3 672 | 15 | 2 654 | 13 | 1 829 | 11 | | |
| Sandvik Materials Technology | 19 337 | 17 003 | 14 423 | 2 324 | 12 | 1 729 | 10 | 1 354 | 9 | | |
| Seco Tools | 5 436 | 4 919 | 4 312 | 1 266 | 23 | 1 100 | 22 | 840 | 19 | | |





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1.00 SEK

0.150010 USD

Sweden Kronor 1 SEK = 0.150010 USD **United States Dollars** 1 USD = 6.66624 SEK

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Live rates at 2007.09.12 16:15:16 UTC

8,107.00 SEK

Sweden Kronor 1 SEK = 0.150010 USD

1,216.13 USD

United States Dollars 1 USD = 6.66622 SEK

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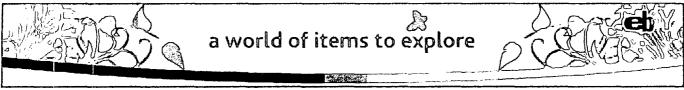
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Memo:

Live rates at 2007.09.12 16:36:16 UTC

5,191.00 SEK

Sweden Kronor 1 SEK = 0.149922 USD 778.247 USD

United States Dollars
1 USD = 6.67012 SEK

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| | TYPE OF TODAY'S INSPECTION DATE OF INSPECTION $\frac{5/u/vy}{v}$ INSPECTOR'S INITIO | ALS FR |
|---|---|---|
| | USER CHARGE S ANNUAL | |
| | □ CATEGORICAL DETERMINATION □ BMR VERIFICATION | |
| | OTHER: | \$ |
| | DATE OF LAST SITE INSPECTION MAY 2003 TYPE OF SITE INSPECTION ANNUOL | site. |
| : | D USER CHARGE D ANNUAL | |
| 1 | CATEGORICAL DETERMINATION D BMR VERIFICATION | |
| | OTHER: | |
| ! | GENERAL INFORMATION | |
| , | · FACILITY NAME: SANDVIK COROMANT CO. | <u>.</u> |
| | • PERMIT NUMBER: (NJ 0088315) 0822 0005 | - |
| , | • PARENT COMPANY OR AFFILIATION: SANDVIK INC | `. - |
| • | · FACILITY MAILING ADDRESS: 1702 Nevins 12000 FAIR LOUN | 7 (1) |
| | FACILITY STREET ADDRESS (if different): Same as Azar | /4/0 // - |
| (| • YEAR PRESENT OPERATIONS BEGAN AT THIS FACILITY: 1955 | -: - |
| | | - |
| | Number of employees 250 Usual hours of operation 24 ms 61 | 095 |
| | Shifts Per Day Shifts Days worked per week C | - |
| | Average days worked per year 300 | •. |
| | · Authorized representativ. Ma JOUKO TANVANAINEN (JT) | 4. |
| | • Facility contact: Some as Above | - |
| | Title or position: FACILITY ENGINEERING MANAGER | · |
| | Telephone no.: 2=1 794-5000 | |
| • | FACILITY PERSONNEL PRESENT AT INSPECTION | |
| | Mr Jouko Tahvanan EN (JT) | • • |
| | | • · · · · · · · · · · · · · · · · · · · |
| | | |
| | | Section . |

III. PRODUCT OR SERVICE INFORMATION:

| 1) | Narrative description of the primary manufacturing or service activity the facility (Note if Bat |
|----|--|
| | Continuous, Seasonal): Mfg Machine Tool (LAther ect) |
| | Tungston Canbine inserts |
| | <u> </u> |
|) | Principal Raw Materials Used: TUNGSTON CARBIDE 95-98% |
| | Colsatt 2% -5% |
| | • ••• |
| | |
| | . . |
|) | Principal product(s) produced: Machine Tools Tungston Canbine |
| | Insects |
| | |
| | |
|) | Is Community Right to Know Survey for the most recent year attached? Yes No \ |
| | If No, Give explanation: |
| | <u> </u> |
|) | List all additional activities and specific processes occurring at this facility (e.g. |
| | Electroplating/metal finishing; identify specific processes, Laboratory, Research, etc.): |
| | CVD Chemical VApon Conting (Departon) |
| | |
| | |
| | |

IV. WATER SOURCES AND USE

| R | Raw Water Sources |
|-----|--|
| • | Public water supply: Specify FAMBUN MUNICIPAL WATER |
| • | Private well (s): NO NA |
| • | Surface water: Specify ND NA |
| A | Are raw water sources metered or are other means available for flow measurement? |
| S | specify: Meters and : 12 comming |
| _ | Worker used on Conting Process is also method |
| _ | |
| _ | |
| | en en en en en en en en en en en en en e |
| D | Describe any water treatment or conditioning processes utilized: |
| | Water Softeners |
| _ | CARBON BED filters |
| _ | |
| _ | Punchase DI WATER U.S. FILTER |
| | |
| A | verage daily water use (specify source of data): |
| 4 3 | 1.54 mil gelper morts - 24 Days Worker = 64,000 gp |
| _ | · · · · · · · · · · · · · · · · · · · |
| _ | |
| _ | |
| _ | · |
| | |

V ENVIRONMENTAL PERMITS/REGISTRATIONS

| 1. | | Permit? Specify ty | Permit Number N5 00 88315 |
|----------------------------|---------------------------|--|-------------------------------|
| | DSW Feither 165 | 140 | Expiration Date 5/31/2007 |
| 2. | DGW Permit? Yes | No. | Permit Number |
| 4. | DOW Permit: 165 | 140 | |
| 3. | (" Orb (if-)/2 V | No. | Expiration Date Permit Number |
| ۵. | Other (specify): Tes_ | 80 | |
| • | | | Expiration Date |
| List parar | meters monitored and meth | od of treatment:_ | |
| | | | |
| | | | |
| | | ··· | |
| | | | |
| . Non-Ha | zardous Solid Waste | | |
| | | | |
| Does th | he company have a NJPDE | S Permit? | |
| | Solid Waste Permit? Ye | | |
| • | | | |
| | Specify | <u> </u> | |
| | Permit Number ~ | (/o Expiratio | m Date r/f |
| 2 | Other (specify) | | |
| 2. | Other (specify) | / | |
| | Permit Number | Expiration | n Date Ma |
| | | | · |
| Hozord | lous Waste/ RCRA | | |
| | | | |
| 1. Is the | company subject to RC | RA? Yes 🔲 1 | No COND+. Brumpt |
| NIDA | CDC ID Normhan - a// | <u> </u> | Final Pote (6 |
| וחנאו | EFE ID Number // | 14 | Expiration Date No |
| | of Permit | | |
| 2. Type | | Disposa | or Treatment Facility |
| | rator Storage | | <u> </u> |
| Gene | | - , | |
| Gene | | - , | days (Storage limit is 90days |
| Gene | | - , | days (Storage limit is 90day |
| G e ne Note | the length of time the ma | - , | days (Storage limit is 90day |
| Gene Note | the length of time the ma | aterial is stored _ | |
| Gene Note | the length of time the ma | aterial is stored _ | days (Storage limit is 90days |
| Gene Note Note S. ISRA/I | the length of time the ma | aterial is stored _ | |

| E. Spill Pi | revention | | | | (DLM) |
|-------------|----------------------|------------------------|--------------------------------|-----------------------------|---------------------------------|
| 1. D | Does the compan | y have a DPC0 | C (SPCC) Plan? Ye Date of L | s No Vast Revision //A | Conditorally exercit |
| | | | | een updated since the | |
| | details under Sl | • | _ | | |
| | | | | page No Changes | |
| 2. D | oes the company | y have an Eme | gency Response P Date of L | lan? Yes No ast Revision | <i>2</i> 002 |
| Atta | ch a copy to this | report only if | it has changed or b | een updated since the | last inspection. |
| Is co | ppy attached? Ye | s No _ | <u> </u> | | No charge |
| F. Air | 4 1 | | on 100 college? Vec | No. | • |
| | | | (e.g. vapor degreasers | No No No No | |
| | | | | | |
| • 1 | Does the facility ha | ve any exhaust sy | stem or air poliution c | ontrol devices in conjuncti | on with their process operation |
| | | | | etc.)? Yes | |
| • 1 | Does the company l | have any Air Polh | ation Permits? Yes | No Site I | D Number 06416 |
| • 1 | Number of Air Polh | ution Permits <u>8</u> | | | : |
| • 1 | List Permits: S | ee Atmicl | nes List | | |
| 1 | Location | | Туре | Permit N | lumber |
| • . | | | | | |
| • | , | | | | |
| • | | | | | |
| • | | | | | |
| • _ | | | | | <u> </u> |
| ls | a list of additional | permits attached? | Yes V No | | |
| ** | | | ight have or specif | y none | what Fanliand |
| <u>A) c</u> | 13-2191 | CAYOGE. | | | |
| 13) 0 | 3-2184 | Bleach, C | oustic SLDD | prios | |

VI. WASTEWATER INFORMATION A. Applicable Standards Categorical Standards (List applicable subparts) 40 CFR 403.12 SectoN/ @ : WPCA State: B. Schematic and Wastewater Flow Diagram(s) 1) Has company provided a process schematic and wastewater flow diagram? Yes 2) Are the water meter locations shown? Yes If not, Prepare sketch and attach to this report. Include the location of the pretreatment, local limit, and user charge sample points and identify each by permit number. Include a narrative description of where the pretreatment, local limit and user charge sample points are located where applicable also identify sample point for collecting cyanide samples after the cyanide destruct system. C. Representative Sampling Point (s) Are the sampling point (s) utilized representative of the operations they are intended to monitor? Yes V No ___ If not, list the deficiencies. ____ 2) Can a PVSC pH meter be installed? Yes No √ If not, list the sample point deficiencies in the comments section of the report. has their own

| D. Storin Water Discharges | |
|--|-----|
| Does the company discharge any storm water into the sanitary sewer? Yes | No_ |
| If yes, are there any other alternatives for disposing of this water such as to a stor | |

If yes, are there any other alternatives for disposing of this water such as to a storm sewer, a brook or stream? Yes ____ No ___ If there are alternatives, explain why the storm water is being discharged into the sanitary sewer. ____ NA ___ Plod is in Effect

| discharged in gall to allow use of the water to the sewer ? Yes | e combined was ? Yes No | NoNA | • |
|--|----------------------------|------------------------------|--|
| to allow use of the water to the sewer to th | e combined water? YesN | NoNA | ormula? |
| water to the sewer ? Yes | 1? Yes N No himl +cs | No_√ NA | |
| water to the sewer ? Yes | 1? Yes N No himl +cs | No_√ NA | |
| s? Yes1 rs: Analy 77 site? YesN | Notios tes | í hi n c | |
| s? Yes1 rs: Analy 77 site? YesN | Notios tes | í hi n c | |
| s? Yes1 rs: Analy 77 site? YesN | Notios tes | í hi n c | |
| rs: ANALY 77 site? YesN | No | | |
| rs: Analy 77 site? YesN | | | |
| rs: Analy 77 site? YesN | | | COMMENT |
| 77 | | | |
| site? YesN | Jo V Bef | T: | |
| | Jo V Paf | | |
| | Jo V Def | Tim | €Catana |
| | Jo V Daf | | 60 |
| | 40 VEI | er to List of | I CRIEROLI |
| ice. | | | |
| unt Stored? | He | ow Used? | ا مد |
| | | | |
| ((| _ | , <u> </u> | 一 。 |
| 1/2 | - | NA | |
| 1 | | 1.3 | |
| | | | _ |
| | **** | | |
| Finisher, has the | e company ch | osen the T | TO . |
| N/A | <u>·</u>) | | |
| omitted to PVSC | : for app roval | ? | |
| | | | |
| le. Write comm | ents below: | • | |
| ovidali | | | |
| | | | |
| | N/A | Finisher, has the company ch | Finisher, has the company chosen the T N/A pmitted to PVSC for approval? |

| Yes No V If yo | eš. | |
|---|--|--|
| | Amount Stored? | How Used? |
| <u>Туре</u> | Amount Stored: | How Used: |
| | - | |
| n// | | |
| 11/7 | $\frac{\sim 10^{\circ}}{\circ}$ | |
| | | , |
| | , | |
| | | · · |
| | TABLE A | |
| Acenaphthene | Toxic Organic Fluoranthene | 1,12-Benzoperylene (benzo(ghi)perylene) |
| Acrolein | 4-Chloropheyl phenyl ether | Fluorene |
| Acrylonitrile | 4-Bromopheyl phenyl ether | Phenanthrene |
| Benzene | Bis (2-chloroisopropyl) ether | 1,2,5.6-dibenzanthracene(dibenzo(a.h)anthracene) |
| Benzidine | Bis (2-chloroethoxy) methane | Indeno(1.2,3-cd)pyrene(2,3-o-phenylene pyrene) |
| Carbon terachloride(tetrachloromethane) | Methylene chloride (dichloromethane) | Pyrene |
| Chlorobenzene | Methyl chloride (chloromethane) | Tetrachloroethylene |
| 1,2,4 - Trichlorobenzene | Methyl bromide (bromomethane) | Toluene |
| Hexachlorobenzene | Bromoform (tribromomethane) | Trichloroethylene |
| 1,2-Dichloroethane | Dichlorobromomethane | Vinyl chloride (chloroethylene) |
| 1,1,1-Trichloroethane | Chlorodibromomethane | Aldrin |
| 1.1.2-Trichloroethane | Hexachlorobutadiene | Dieldrin |
| Hexachloroethane | Hexachlorocyclopentadiene | Chlordane (technical mixture and metabolites): |
| 1.1-Dichloroethane | Isophorone | 4.4-DDT |
| 1,1,2-Trichloroethane | Naphthalene | 4,4-DDE (p,p-DDX) |
| 1.1.2.2-Tetrachloroethane | Nitrobenzene | 4,4-DDD (p,p-TDE) |
| Chloroethane | 2-Nitrophenol | Alpha-endosulfan |
| Bis (2-chloroethyl) ether | 4-Nitrophenol | Beta-endosulfan |
| 2-Chloroethyl vinyl ether (mixed) | 2,4-Dinitrophenol | Endosulfan sulfate |
| 2-Chloronaphthalene | 4,6-Dinitro-o-cresol | Endrin |
| 2.4,6-Trichlorophenol | N-nitrosodimethylamine | Endrin aldehyde |
| Parachlorometa cresol | N-nitrosodiphenylamine | Heptachlor |
| Chloroform (trichloromethane) | N-nitrosodi-n-propylamine | Heptachlor epoxide |
| 2-Chlorophenol | Pentachlorophenol | (BHC-hexachiorocyclohexane) |
| 1.2-Dichlorobenzene | Phenol | Alpha -BHC |
| 1.3-Dichlorobenzene | Bis (2-ethylhexyl) phthalate | Beta-BHC |
| 1,4-Dichlorobenzene | Butyl benzyl phthalate | Gamma-BHC |
| 3.3-Dichlorobenzidine | Di-n-butyl phthalate | Delta-BHC |
| 1.1-Dichloroethylene | Di-n-octyl phthalate | (PCB-polychlorinated biphenyls) |
| 1.2,-Trans-dichloroethylene | Diethyl phthalate | PCB-1242 (Arochlor 1242) |
| 2.4-Dichlorophenol | Dimethyl phthalate | PCB-1254 (Arochlor 1254) |
| 1.2-Dichloropropane | 1,2-benzanthracene (benzo(a)anthracene) | PCB-1221 (Arochlor 1221) |
| 1,3 - Dichloropropylene (1,3-dichloropropene) | Benzo(a)pyrene (3,4-benzopyrene) | PCB-1232 (Arochlor 1232) |
| 2,4-Dimethylphenol | 3,4-Benzofluoranthene (benzo(b)fluoranthene) | PCB-1248 (Arochlor 1248) |
| 2,4-Dinitrotoluene | 11,12-Benzofluoranthene (benzo(k)fluoranthene) | PCB-1260 (Arochlor 1260) |
| 2.6-Dinitrotoluene | Chrysene | PCB-1016 (Arochlor 1016) |

1.2-Diphenylhydrazine

Ethylbenzene

Acenaphthylene

Anthracene

Toxaphene

2,3,7,8-tecrachloro-dibenzo-p-dioxin (TCDD)

VIII PRETREATMENT FACILITIES

| a . | Is any treatment performed on the wastewater prior to discharge to the public sewer? Yes No |
|------------|---|
| | Describe/Comments: Oh Neutralizado J |
| | |
|). | Does the Company maintain pretreatment equipment maintenance records? Yes Vo_N/A_ |
| | If no, instruct them to start keeping these records. |
| | If yes, review them. Are they adequate? Yes No |
| | Explain deficiencies, if any: |
| | |
| | |
| :. | Has any additional treatment been installed since the last inspection? Yes No N/A Is it complete? Yes No N/A What percentage has been completed? No N/A Comments: |
| _ | M/A |
| | |
| I. | Is any further treatment proposed to be utilized on the wastewater prior to discharge to the |
| • | tomments: |
| _ | |
| | |

| compliance with applicable standards? Yes No N/A If no, is facility in compliance? Yes No Comments: On Comments: No Comments |
|--|
| f. Boiler Operation (1) Does the company have a licensed boiler operator? Yes No Note the name(s) of the licensed boiler operator(s) along with the type of license they possess (black seal, blue seal, etc.) ALBERT Dietnich BWE SEEL |
| (1) Does the company have a licensed boiler operator? Yes No Note the name(s) of the licensed boiler operator(s) along with the type of license they possess (black seal, blue seal, etc.) ALBert Dietnich BWE Seel |
| Note the name(s) of the licensed boiler operator(s) along with the type of license they possess (black seal, blue seal, etc.) ALBert Dietnich BWE Seal |
| (1) Does the company have a licensed boiler operator? Yes No Note the name(s) of the licensed boiler operator(s) along with the type of license they possess (black seal, blue seal, etc.) Albert Dictrich BWe Seel |
| (1) Does the company have a licensed boiler operator? Yes No |
| (1) Does the company have a licensed boiler operator? Yes No |
| Note the name(s) of the licensed boiler operator(s) along with the type of license they possess (black seal, blue seal, etc.) ALBert Dietnich BWE Seel |
| Note the name(s) of the licensed boiler operator(s) along with the type of license they possess (black seal, blue seal, etc.) ALBert Dietnich BWE Seal |
| BWe sest |
| |
| Is the boiler water treated prior to use? Yes No If yes, what sort of treatment is |
| is the boner water treated prior to use: Tes if yes, what sort of treatment is |
| Shiel as a some Some (Commerce) who |
| performed? Soften Oz Scarenger, Sosting (Contrast of mins) |
| |
| Is the condensate return from the boiler sewered? YesNoIf yes, explain what |
| treatment if any is performed on this discharge. No Confed station |
| Hot water system, |
| (2) Does the company have a licensed Industrial Wastewater Treatment Operator? |
| Yes No If yes, note Class |
| Note the name(s) of the licensed operator(s) along with the type of license they |
| possess. |

IX. Slug Control

| oes the user have a plan to control Slug Discharges? Yes, No_ | | |
|--|-------------|----------|
| no, Evaluate whether the user needs a plan to control "Slug Discharges | Attach | 12. |
| a narrative onto the site inspection report. | | |
| If yes, write date of approved plan May 1996. Have there been an | y changes? | 7 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | • |
| cess Areas | | ٠ |
| cess Areas Are process area(s) diked? Yes . No | | |
| Are process area(s) diked? Yes, No | . No | √ |
| Are process area(s) diked? Yes, No Are the process areas located near drains (Storm or Sanitary)? Yes | | · |
| Are process area(s) diked? Yes, No Are the process areas located near drains (Storm or Sanitary)? Yes, Are tanks, pumps, piping, and or valves leaking? Yes, No, | <u> </u> | |
| Are process area(s) diked? Yes, No Are the process areas located near drains (Storm or Sanitary)? Yes, Are tanks, pumps, piping, and or valves leaking? Yes, No, No, No, No | er control | |
| Are process area(s) diked? Yes, No Are the process areas located near drains (Storm or Sanitary)? Yes, Are tanks, pumps, piping, and or valves leaking? Yes, No, No, No | er control | |
| Are process area(s) diked? Yes, No Are the process areas located near drains (Storm or Sanitary)? Yes, Are tanks, pumps, piping, and or valves leaking? Yes, No, No, No, No, No, No | er control | |
| Are process area(s) diked? Yes, No Are the process areas located near drains (Storm or Sanitary)? Yes, Are tanks, pumps, piping, and or valves leaking? Yes, No, No, No | er control | |
| Are process area(s) diked? Yes, No Are the process areas located near drains (Storm or Sanitary)? Yes, Are tanks, pumps, piping, and or valves leaking? Yes, No, No, No | er control | |
| Are process area(s) diked? Yes, No Are the process areas located near drains (Storm or Sanitary)? Yes, Are tanks, pumps, piping, and or valves leaking? Yes, No, No, No, No | er control | |

| (3) | Har | dling | Pro | ced | ures |
|-----|-----|-------|-----|-----|------|
|-----|-----|-------|-----|-----|------|

| | Has the c | ompany o | ieveloped a | dequate ha | ndling | procedures | s to prev | ent organic | s or any | other |
|-----------------|--------------|-------------|---------------|---------------|-------------|-------------|-------------|-------------|-------------|--|
| | possibly ha | zardous r | naterials us | ed during p | rocess | operations | s, from re | eaching the | sewer ir | 1 |
| | amounts ex | ceeding i | federal stand | lards or wi | ich co | uld cause p | roblems | to the PVS | C treatm | nent nent |
| | works? Ex | plain how | v company p | ersonnel a | re acti | vely imple | menting | these proce | edures. L | ist |
| | | : | NA | | | | | | | |
| 700 _ | any deficie | ncies: | , ,, | | -00 | , | | Iso . | _ | 1 |
| to charts | <u> </u> | <u>ISO</u> | pAcces | ones in | CAL | cct | 900 | 0/14,000 | Cert | to eo |
| CD. | | | · | | | | | | • | |
| | | _AB | Qurys | ir Coe | ines. | | | | | |
| | | Ever | 1 | | | | | | | - • • |
| | | | | , | | | | | | |
| | | | · | | | | | | | - 4 - 5 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| (4) <u>Trai</u> | nina | | | | | | | | | جر. حرب |
| (7) IIAII | utor. | | | | | | | | | |
| D | oes the com | pany trai | n its employ | vees in the | рторег | handling o | of proces | s or waste | materials | ? |
| | Yes_v | No _ | | | | | | | | ક્ષ્મું કું કું કું જો કું કું |
| Ya | yes, does th | ha aamma | | | |) | hae ia eba | . . | - Camini | |
| 11 | yes, does u | ne compa | пу шашаш | nammig re | | * | | : nequency | OI UAIII | ng. |
| | | | | | (| Contifica | nors | | | 20/1 |
| Re | econos Ko | ept on | file | ANN | ubl | Cents | Ron : | Involveo | Emp | oyers |
| | | | | | | | | | | |
| | | ··········· | | | | | | | | 100 |
| | | | | | · | | | | | |
| | | | ·· | - | | | | | | |
| | | | | | | | | | - | The state of the s |

X WASTE

| a. Does this company generate any waste process solutions (spent solvents, spent acids, et | c)'. |
|---|------------|
| YesNoIf yes, note what these materials are, the quantity generated per | |
| month, how they are stored, and how they are disposed of? | |
| Note gealunte | |
| If licensed hauler used, name the company \(\frac{\seta}{A} | |
| b. Does this company generate <u>residuals</u> as a result of its <u>Process</u> operations? YesNoIf yes, note what the residual are, the quantity generated per months. | th, |
| how they are stored, and how they are disposed of: $ { } { } { } { } $ | _ |
| All tungston is neuseo on site | _ |
| | |
| c. Does this company generate <u>residuals</u> as a result of its <u>Pretreatment</u> operations? | |
| YesNoIf yes, note what the residual are, the quantity generated per month how they are stored, and how they are disposed of:N | n, — |
| d. Does this company have designated or centralized area (s) for the storage of hazardous | |
| waste? YesNoN/A (No hazardous waste generated). If yes, who | |
| does the company do with their hazardous waste? No No haz woste of | <u>5</u> 4 |
| Is a copy of the latest manifest(s) attached? Yes VNo_If no, give reason: | |
| Now Dot Waste mandest (Attaches) | _ |
| e. Are the raw organics and/ or spent organics stored in an area appropriately safeguarded against spills reaching the sewer? Yes V No No | |
| Storage area observations (describe dikes, containment methods, location of drains, etc.) |): |
| | |
| - Dikes Aress in good shape | |
| - NO Brains in Aness of phoress | |
| - Any all spill usour DBE sent to pretrustment | • |
| Prior to Discharge | ; |
| LA3 QFY WASTE Stones it CA2.n27 | |

| NSTRUMENTAT | ION (Specify | | | | | | |
|--|-------------------|-----------------------------------|---|-------------|-------------|--------|--------------|
| Effluent flow met | er (Specify ty | pe and rea | ding, Gal. | , Cubic F | eet) | . / | |
| Effluent flow meter | er recorder (1 | Note type, i | nclude de | cimal pla | ce) | NA | |
| Are flow meters n | | | | | | ٠ | ชื่ |
| Well meter? Yes | N | 10 4kg | - | | | | |
| Describe where m | eters are loca | nted | | | | | |
| How often are the | | | | | 7(0 | | When was the |
| last calibration do | ne ? | NW. | | | | | *** |
| Are there any inter | mal meters? | Yes | No | | | | |
| Describe the type | | | | | | | \ . |
| Pracess | netus | (2) | (Sce | Six | pbu | Atrack | us) |
| | | | | | • | | |
| pH meter? Yes pH recorder? Yes LEL meter? Yes pH paper reading of | N | NoN | Note Read ote Readi | ing 🦞 | - | -4 | · · |
| pH recorder? Yes LEL meter? Yes pH paper reading of | sl of effluent at | NoN loN outlet(s): _ | Note Reading | ing P | • | | ·. |
| pH recorder? Yes LEL meter? Yes pH paper reading of AMPLING PROCesscribe the general con | s | NoN loN outlet(s): _ | ote Reading | ng | • | | ·. |
| pH recorder? Yes LEL meter? Yes pH paper reading of | s | NoN loN outlet(s): _ | ote Reading | ng | • | | ·. |
| pH recorder? Yes LEL meter? Yes pH paper reading of AMPLING PROCesscribe the general con | S | NoN loN outlet(s): mple point (Is | ote Reading | ng | • | | ·. |
| pH recorder? Yes LEL meter? Yes pH paper reading of the paper reading of the general conscribed the general conscribed the general conscribed the general conscribed the general conscribed the general conscribed the general conscribed the general conscribed the general conscribed the general conscribed the general conscribed the general conscribed t | S | nple point (Island Ray | ote Reading | ng | • | | ·. |
| pH recorder? Yes LEL meter? Yes pH paper reading of the paper reading of the general construction of the company have | S | nple point (Island) & Sampler? | ote Reading | ng | • | | ·. |
| pH recorder? Yes_LEL meter? Yes_pH paper reading of the paper reading of the paper reading of the procedure correct, the procedure correct, | S | mple point (Is sampler? | ote Reading lands it in a pit, lands access | a pipe, etc | ? Is it kep | | ·. |
| pH recorder? Yes LEL meter? Yes pH paper reading of SAMPLING PROCescribe the general con oes the Company have | S | mple point (Is sampler? | ote Reading lands it in a pit, lands access | a pipe, etc | ? Is it kep | | ·. |

| a | Are sample point(s) representative of all industrial discharge(s)that they are required to monitor? Yes | No |
|-----------|---|--|
| | If not, describe what you informed the company to do to correct the problem? | |
| | | 125 - 126 - 126 |
| ם | Is Sampler Refrigerated? Yes No How? BULLY IN Refer. | |
| | If no, explain how the Company maintains the proper temperature of the sample? | |
| | | |
| E3 | If Sampler is operating, note temperature of sample | Garage a si gne |
| | Can Sampler be sealed? Yes No N/A | |
| | Is Sample Point accessible? Yes No N/A | |
| | Does sample point (s) match the one (s) stated in the Sewer Connection Permit? Yes No | N/A |
| ۵ | ls Sample Hose in the proper place? Yes No N/A | |
| | List the types of samples required at this company: BOD, TSS, Local Linits netals, C | 1. |
| ם | Are any analytical instruments recommended for this company? Yes No | |
| | Which ones? | en en en en en en en en en en en en en e |
| | which ones? | الله الله الله الله الله الله الله الله |
| | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| | | <u> </u> |
| XI | II COMMENTS - (Use another sheet if necessary) | |
| | Company has made not not & zero Chi | , nges |
| | Sirce LAST Inspection | |
| | <u> </u> | |
| | Company maintains strin Byngment AND | |
| | REcons A+ A high StorDARD | 3 6 6 5 7 7 2 2 3 |
| | -> Phones / som irany Scp Dischage line | |
| | -> ADD What is Attacked | ************************************** |
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| XIV INSPECT | TOR(S) | | | | | | | | | * | |
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| Na | iame: | F Grand | | | Name: | | | • | | (Gage | |
| | | | | | | | | - | | L h,c | |
| Tit | itle: | Inspector | | | Title: | | | | | | |
| Sig | ignature: _ | Tour Sta | | | Signature: | | | | | نيار جي در د پ | امد انجر: «امد |
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| Pro | repared By | 1: SAME A | N 130-7 | | | | _ | | i | | 15.00 |
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| | (| 10 11 | 115/1 | | | | | | ا د د دهاد داخیستان | | 100 |
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| Revised 11/98 | t | $>$ ℓ | / / | | | | ~ | ** | | | |
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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMUNITY RIGHT TO KNOW SURVEY FOR 2003

For State and Federal Community Right to Know Reporting

| SANDVIK INC | |
|-------------|--|

Facility ID: 17272100000

SIC: 3545

NAIC: 333515 (A) Facility Location:

SANDVIK INC 1702 NEVINS ROAD FAIRLAWN, NJ 07410

1702 NEVINS RD FAIR LAWN, NJ 07410

| (B) Does this facility Produc Substance on Table A: | e, Store, or Use Env | ironmental Hazardous | |
|---|----------------------|------------------------------------|--|
| | | | 250 |
| 1. In any quantity? | Yes (X) | () No | (E) Number of facilities in New Jersey: |
| 2. Above thresholds? | Yes() | (X) No | (F) Federal EIN: |
| 2. Above thesholds: | 163() | (X)110 | 221717737 |
| (C) Facility Status: | | | (G) If you are claiming an R&D lab exemption for this facility, enter your approval number here. |
| : | <u>Active</u> | | No R&D lab exemption |
| (H) Are you reporting pursua Know Act(EPCRA/SARA, Tit | | 2 of the Federal Emero | gency Planning and Community Right ot |
| | Yes () | No(X) | |
| (I) FACILITY EMERGENCY | CONTACT: | | |
| Name: ALBERT DIETR Facility Phone Number: (| | Title: MAINTENA Emergency Conta | NCE SUPRV act Phone: (201) 794-5139 |

| ı | (J) CERTIFICATION OF OWNER/OPERATOR OR AUTHORIZED REPRESENTATIVE — I certify under penalty of law that I have personally |
|---|--|
| 1 | examined and am familiar with the information submitted in this document and all attachments and that based on my inquiry of those individuals |
| | immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. |
| ł | 11.51 * 11 |

Signature:

Da

125/04

Phone #: (201) 794-5313

Name: ANDERS HILLMAN

Title: PLANT MGR

Email: Anders.hillman@sandvik.com

(Please sign and date. Mail copies to your local Police, Fire departments, county lead agency and local emergency planning committee.)

Page 2 of 5

Legend

CONTAINER CODES AND DESCRIPTIONS

| TA | Above ground tank | BA | Bag |
|----|----------------------|----|----------|
| TB | Below ground tank | BX | Box |
| TI | Tank inside building | CY | Cylinder |

DS Steel drum BG Bottles of jugs (glass)
DP Plastic drum BP Bottles of jugs (plastic)

DF Fiber drum BN Tote bin
CN Can TW Tank wagon
CB Carboy RC Railcar

SI Silo OT Other (describe)

INVENTORY RANGE CODES

| 20 Greater than 10 million pour |
|---------------------------------|
|---------------------------------|

- 19 1,000,001 to 10 million pounds
- 18 500,001 to 1 million pounds
- 17 250,001 to 500,000 pounds
- 16 100,001 to 250,000 pounds
- 15 50,001 to 100,000 pounds
- 14 10,001 to 50,000 pounds
- 13 1,001 to 10,000 pounds
- 12 101 tp 1,000 pounds
- 11 11 to 100 pounds
- 10 1 to 10 pounds
- 09 Less than 1 pound

STORAGE TEMPERATURE AND PRESSURE CODES

<u>Pressure</u>

- 01 Ambient* pressure
- 02 Greater than ambient pressure
- 03 Less than ambient pressure

Temperature

- 04 Ambient temperature
- 05 Greater than ambient temperature
- 06 Less than ambient temperature but not cryogenic (freezing conditions)
- 07 Cryogenic condition (less than -200 C)

^{*} Ambient means "normal", "surrounding," or "room" conditions

Facility ID: 17272100000

Page <u>3</u> of <u>5</u>

SANDVIK INC

1702 NEVINS RD FAIR LAWN, NJ 07410

PART 2 2003 CHEMICAL INVENTORY REPORT

Reporting Period: January 1 - December 31, 2003

| SUBSTANCE DESCRIPT | ION | HA | AZARDS | INVENTORY INFOR | MATION |
|----------------------------------|--------------|--------------|----------------------------|------------------------|-------------|
| Name: COBALT | | () | Fire | Container type | CN |
| Substance Number: 0520 | | () | Sudden release of pressure | Max. daily inventory | <u>13</u> |
| CAS Number: <u>7440-48-4</u> | | () | Reactive | Avg. daily inventory | 13 |
| DOT Number: | | () | Acute health effects | Days on site | <u>365</u> |
| Pure () or Mixture (X) | | (X) | Chronic health effects | Storage pressure | <u>01</u> |
| Solid () Liquid () or Gas | (X) | () | None per MSDS | Storage, temperature | <u>04</u> |
| Trade Secret: () | Location(s) | Plant ' | wide | | |
| Name: ETHYL ALCOHOL | ± | (X) | Fire | Container type | <u>DS</u> |
| Substance Number: 0844 | | () | Sudden release of pressure | Max. daily inventory | <u>12</u> |
| CAS Number: <u>64-17-5</u> | | () | Reactive | Avg. daily inventory | 12 |
| DOT Number: 1170 | | (X) | Acute health effects | Days on site | <u>365</u> |
| Pure () or Mixture (X) | | (X) | Chronic health effects | Storage pressure | <u>01</u> · |
| Solid () Liquid () or Gas | (X) | () | None per MSDS | Storage temperature | <u>04</u> |
| Trade Secret: () | Location(s) | 66-W | arehouse | | |
| Name: <u>HYDROGEN</u> | | (X) | Fire | Container type | <u>TA</u> |
| Substance Number: 1010 | | (X) | Sudden release of pressure | Max. daily inventory | <u>13</u> |
| CAS Number: <u>1333-74-0</u> | | () | Reactive | Avg. daily inventory | 13 |
| DOT Number: 1049 | | () | Acute health effects | Days on site | <u>365</u> |
| Pure (X) or Mixture () | | () | Chronic health effects | Storage pressure | <u>02</u> |
| Solid () Liquid () or Gas (| (x) | () | None per MSDS | Storage temperature | <u>06</u> |
| Trade Secret: () | Location(s) | SOUT | H EAST CORNER OF PRO | <u>PERTY</u> | |
| Name: <u>HYDROGEN CHL</u> (ONLY) | ORIDE GAS | () | Fire | Container type | CY |
| Substance Number: 2909 | • | (X) | Sudden release of pressure | Max. daily inventory | <u>13</u> |
| CAS Number: <u>7647-01-0</u> | | (X) | Reactive | Avg. daily inventory | 12 |
| DOT Number: <u>1050</u> | | (X) | Acute health effects | Days on site | <u>365</u> |
| Pure (X) or Mixture () | | () | Chronic health effects | Storage pressure | <u>02</u> |
| Solid () Liquid () or Gas | (x) | () | None per MSDS | Storage temperature | <u>04</u> |
| Trade Secret: () | Location(s) | GAS S | STORAGE ROOM | | |

Facility ID: 17272100000

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SANDVIK INC

PART 2 2003 CHEMICAL INVENTORY REPORT

1702 NEVINS RD FAIR LAWN, NJ 07410

Reporting Period: January 1 - December 31, 2003

| SUBSTANCE DESCRIPTION | | | ZARDS | INVENTORY INFORMATION | |
|-------------------------------|----------------|-------|----------------------------|-----------------------|------------|
| Name: <u>Heating oil</u> | | (X) | Fire | Container type | <u>TB</u> |
| Substance Number: 2444 | | () | Sudden release of pressure | Max. daily inventory | <u>14</u> |
| CAS Number: <u>68476-34-6</u> | | () | Reactive | Avg. daily inventory | 14 |
| DOT Number: <u>1993</u> | | (X) | Acute health effects | Days on site | <u>365</u> |
| Pure () or Mixture (X) | | (X) | Chronic health effects | Storage pressure | <u>01</u> |
| Solid (X) Liquid () or Gas | s() | () | None per MSDS | Storage temperature | <u>04</u> |
| Trade Secret: () | Location(s) | Front | of court yard | | |
| Name: <u>METHANE</u> | | (X) | Fire | Container type | CY |
| Substance Number: 1202 | | (X) | Sudden release of pressure | Max. daily inventory | <u>12</u> |
| CAS Number: <u>74-82-8</u> | | () | Reactive | Avg. daily inventory | 12 |
| DOT Number: <u>1971</u> | | () | Acute health effects | Days on site | <u>365</u> |
| Pure (X) or Mixture () | | () | Chronic health effects | Storage pressure | 02 |
| Solid () Liquid () or Gas (| X) | () | None per MSDS | Storage temperature | 04 |
| Trade Secret: () | Location(s) | GAS S | STORAGE ROOM | | |
| Name: PHOSPHORIC ACI | D, DIMETHYL 4- | () | Fire | Container type | <u>DP</u> |
| Substance Number: 2674 | | () | Sudden release of pressure | Max. daily inventory | 12 |
| CAS Number: <u>3254-63-5</u> | | (X) | Reactive | Avg. daily inventory | 12 |
| DOT Number: 3018 | | (X) | Acute health effects | Days on site | <u>365</u> |
| Pure () or Mixture (X) | | () | Chronic health effects | Storage pressure | <u>01</u> |
| Solid () Liquid (X) or Gas | s() | () | None per MSDS | Storage temperature | <u>04</u> |
| Trade Secret: () | Location(s) | 66 WA | AREHOUSE | | |
| Name: <u>SULFURIC ACID</u> | | () | Fire | Container type | DP |
| Substance Number: 1761 | • | () | Sudden release of pressure | Max. daily inventory | 12 |
| CAS Number: <u>7664-93-9</u> | | (X) | Reactive | Avg. daily inventory | 12 |
| DOT Number: 1830 | | (X) | Acute health effects | Days on site | <u>365</u> |
| Pure () or Mixture (X) | | () | Chronic health effects | Storage pressure | <u>01</u> |
| Solid () Liquid (X) or Gas | s() | () | None per MSDS | Storage temperature | <u>04</u> |
| Trade Secret: () | Location(s) | 66-Wa | arehouse | | |

Facility ID: 17272100000

Page <u>5</u> of <u>5</u>

SANDVIK INC

PART 2 2003 CHEMICAL INVENTORY REPORT

1702 NEVINS RD FAIR LAWN, NJ 07410

Reporting Period: January 1 - December 31, 2003

| SUBSTANCE DESCRIPTION | HAZARDS | INVENTORY INFORMATION | |
|-----------------------------------|-------------------------------|---------------------------|--|
| Name: TITANIUM TETRACHLORIDE | () Fire | Container type <u>CY</u> | |
| Substance Number: 1864 | () Sudden release of pressure | Max. daily inventory 13 | |
| CAS Number: <u>7550-45-0</u> | (X) Reactive | Avg. daily inventory 13 | |
| DOT Number: 1838 | (X) Acute health effects | Days on site 365 | |
| Pure (X) or Mixture () | () Chronic health effects | Storage pressure 01 | |
| Solid () Liquid (X) or Gas () | () None per MSDS | Storage temperature 04 | |
| Trade Secret: () Location(s) | Gas storage room | | |

| NON-HAZARDOUS WASTE MANIFEST | 1. Generator's US EPA ID No. NOTREQUIRE | Manifest Document No. | 2. Page k | |
|--|--|--|-------------------------|-----------------------|
| '3. Generator's Name and Mailing Address | | · ! | 7.5 | |
| Sandvik Coromant Company 1702 Nevins Road, Fairlawn, N 4. Generator's Phone (201 794-5139 | IJ 07410 | | Site: Same | > |
| 5. Transporter 1 Company Name | 6. US EPA ID | | A. Transporter's Phone | · |
| SJ Transportation Company | N J D O 7-1- | | 856-769-2741 | ···· |
| 7. Transporter 2 Company Name | 8. US EPA ID | · · · · · · · · · · · · · · · · · · · | B. Transporter's Phone | |
| Designated Facility Name and Site Address Waste Management/American | Landfill, Inc. | Number | C. Facility's Phone | |
| 7916 Chapel Street, S.E. Waynesburg, OH 44688 | NOTREG | HIPEN | (330) 866-3265 | |
| 11. Waste Shipping Name and Description | 100 | OINED | 12. Containers | 13. 14. Total Unit |
| °. N. DOT N. DODA D | | | No. Type | Quantity Wt/Vol |
| On DOT, Non RCRA Regulate (Gypsum/Graphite) | ed Material | ************************************** | 10 88 pm | \$1.856W |
| b. Non DOT, Non RCRA Regulate | ed Material | | | |
| (Wet Aluminum Oxide) | THE RESERVE THE PROPERTY OF TH | | - | |
| · · · · · · · · · · · · · · · · · · · | | | | |
| Non D QT, Non RCRA Regulate (Dry Aluminum Oxide) | d Material | | | |
| d. Non DOT, Non RCRA Regulate (Wood Cellulose) | od Materiai | | 092 DM | 41400W |
| | ove p#/31096 p#/31096 Job#WiLM-BW# | NS-1246 | E. Handiing Codes for W | astes Listed Above |
| | Information Rimental Svcs., Wilmington, DE Environmental (302) 652-8999 | | | |
| 14 CENERATOR'S CERTIFICATION | | | also a fee and a | P. 1 (1) 1 . M |
| 16. GENERATOR'S CERTIFICATION: 1 certify the Printed/Typed Name ALBERT PDIET | RICH Signapure | off L | heteeth proper | Manth Day Year |
| 17. Transporter 1 Acknowledgement of Receipt of | non et signapore | ule to | nope | 17/184 |
| 18. Transporter 2 Acknowledgement of Receipt of | | * | | |
| Printed/Typed Name | Signature | | | Month Day Year |
| 19. Discrepancy Indication Space | | : | | ٠ |
| , , | | | <u> </u> | , • |
| 20. Facility Owner or Operator: Certification of re | ceipt of waste materials covered by this m | gnifest except as note | d in Hern 19. | |
| Printed/Typed Name | Signature | | 7 | Monthly gay Year |
| | TRANSPORTER # | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | 19 11 11 11 |

| USER CHARGE CATEGORICAL DETERMINATION OTHER: TYPE OF SITE INSPECTION USER CHARGE CATEGORICAL DETERMINATION OTHER: ENERAL INFORMATION FACILITY NAME: CATEGORICAL DETERMINATION FACILITY NAME: CATEGORICAL DETERMINATION FACILITY NAME: CANADAL CATEGORICAL DETERMINATION |
|---|
| OTHER: |
| TYPE OF SITE INSPECTION USER CHARGE CATEGORICAL DETERMINATION OTHER: ENERAL INFORMATION TYPE OF SITE INSPECTION D BMR VERIFICATION ENERAL INFORMATION |
| USER CHARGE CATEGORICAL DETERMINATION OTHER: ENERAL INFORMATION |
| CATEGORICAL DETERMINATION OTHER: ENERAL INFORMATION |
| ENERAL INFORMATION |
| |
| FACILITY NAME: Sandwich Corp |
| • |
| PERMIT NUMBER: |
| PARENT COMPANY OR AFFILIATION: 1702 News Rd Fair Four |
| FACILITY MAILING ADDRESS: |
| FACILITY STREET ADDRESS (if different): |
| YEAR PRESENT OPERATIONS BEGAN AT THIS FACILITY: 1951 |
| |
| Number of employees 250 Usual hours of operation 24 |
| • Shifts Per Day Days worked per week |
| Average days worked per year 300 |
| Authorized representative: Q Wegen |
| • Facility contact: Mr Takawan |
| Title or position: Engineer |
| • Telephone no.: 794 5706 |
| FACILITY PERSONNEL PRESENT AT INSPECTION (Lahvan |
| |

| a) | Narrative description of the primary manufacturing or service activity the facility (Note |
|----|---|
| | Continuous, Seasonal): Mfg of carbide Cutting Look |
| b) | Principal Raw Materials Used: Carbine pourder mixture |
| | |
| :) | Principal product(s) produced: Carbide products |
| i) | Is Community Right to Know Survey for the most recent year attached? Yes No |
| | If No, Give explanation: |
| :) | List all additional activities and specific processes occurring at this facility (e.g. |
| | Electroplating/metal finishing; identify specific processes, Laboratory, Research, etc.): |
| | |

| <u>WA1</u> | ER SOURCES AND USE |
|------------|--|
| a. | Public water supply: Specify Aur M Private well (s): |
| b. | Are raw water sources metered or are other means available for flow measurement? Specify: |
| c. | Describe any water treatment or conditioning processes utilized: |
| d. | Average daily water use (specify source of data): 1030 m 59 |
| | |

V ENVIRONMENTAL PERMITS/REGISTRATIONS

| A. Water | | | |
|----------------|---------------------------------------|--|---|
| Does the | company have a NJPDES Pe | rmit? Specify | type |
| 1. , | DSW Permit? Yes | No | Permit Number |
| | | | Expiration Date |
| 2. | DGW Permit? Yes | No | Permit Number |
| | | 1 | Expiration Date |
| 3. | Other (specify)? Yes | No | Permit Number |
| | | | Expiration Date |
| List parar | meters monitored and method | of treatment: | |
| | | ······································ | |
| | : | : | |
| | | | 1 |
| B. Non-Ha | azardous Solid Waste | | |
| Does th | he company have a NJPDES | Permit? | |
| | Solid Waste Permit? Yes | | |
| | Specify | | • |
| | • , | | tion Date |
| 2. | , | • | |
| | | | ion Date |
| | | | , |
| C. Hazard | ous Waste/ RCRA | | |
| 1. Is the | company subject to RCR. | A? Yes | No |
| | EPE ID Number 0463 | | Expiration Date |
| | | | Expiration Date |
| - - | of Permit | | |
| Gene | rator Storage | Dispos | al or Treatment Facility I days (Storage limit is 90days). |
| Note | the length of time the mate | erial is stored | days (Storage limit is 90days). |
| | | | |
| D. ISRA/I | ECRA | | |
| Is the co | ompany subject to ISRA (E | CRA)? Yes | □ No \ |
| | | | |
| opconj_ | · · · · · · · · · · · · · · · · · · · | | |

| E. Spill Prevention | | |
|---|---|---|
| 1. Does the company have a | a DPCC (SPCC) Plan? Yes _ Date of Last | No Revision 9 |
| Attach a copy to this report | only if it has changed or been | updated since the last inspection |
| (See details under Slug Plan | Section). | |
| Is copy attached? Yes | No | |
| 2. Does the company have a | n Emergency Response Plan Date of Last | ? Yes No Revision |
| Attach a copy to this report | only if it has changed or been | updated since the last inspection. |
| Is copy attached? Yes | No | |
| | greater than 100 gallons? Yes | · / |
| | | :• |
| Does the facility have any ex | hanst system or air pollution contr | ol devices in conjunction with their process operations |
| (e.g. from plating tanks, pain | ting rooms, vapor degreasers, etc.) | ? Yes No |
| Does the company have any. | Air Pollution Permits? Yes | No Site ID Number 90 11 |
| Number of Air Pollution Pen | mits 14 | |
| • List Permits: See | attacled | : |
| Location | Туре | Permit Number |
| • | | |
| • | | |
| • | | - |
| • | | |
| • | | - |
| For East of a Additional according | | |
| Is a list of additional permits a | | |
| G. List any other permits the comp | pany might have or specify no | one./ |
| | <u></u> | |
| | | |

VI. WASTEWATER INFORMATION A. Applicable Standards Categorical Standards (List applicable subparts) 40 CFu 403 B. Schematic and Wastewater Flow Diagram(s) 1) Has company provided a process schematic and wastewater flow diagram? Yes __No_ 2) Are the water meter locations shown? Yes ____ If not. Prepare sketch and attach to this report. Include the location of the pretreatment, local limit, and user charge sample points and identify each by permit number. Include a narrative description of where the pretreatment, local limit and user charge sample points are located where applicable also identify sample point for collecting cyanide samples after the cyanide destruct system. Atom of Hontho C. Representative Sampling Point (s) Are the sampling point (s) utilized representative of the operations they are intended to 1) monitor? Yes ____No ____ If not, list the deficiencies. _____ 2) Can a PVSC pH meter be installed? Yes ___ No ___ If not, list the sample point deficiencies in the comments section of the report. D. Storm Water Discharges Does the company discharge any storm water into the sanitary sewer? Yes If yes, are there any other alternatives for disposing of this water such as to a storm sewer, a brook or stream? Yes ____ No ____If there are alternatives, explain why the storm water is being discharged into the sanitary sewer.

| | Specify: | process wastewater discharged in gallon | us per day:030_ns_c | | |
|----|---|--|------------------------|--|--|
| | Yes No | t flow data obtained to allow use of the o | | | |
| | Does Company discharge | e non-contact wastewater to the sewer? | Yes NoNA | | |
| | If yes, list approximate v | olume | | | |
| | Is a certified lab used for | all official analyses? Yes No | | | |
| | Lab name, location, and | NJDEPE Numbers: | tral Perling | | |
| | ************************************** | <u> </u> | | | |
| | | | ; | | |
| T | OXIC ORGANICS MANA | GEMENT | <u> </u> | | |
| a) | Are toxic organics listed in | Table A used on site? YesNo | Refer to List of Categ | | |
| | organics attached to the | nis form for guidance. | | | |
| | Type | Amount Stored? | How Used? | | |
| | | | | | |
| | | | | | |
| | | *************************************** | | | |
| | | | | | |
| | | | | | |
| b) | If the company is an Electr | roplater or a Metal Finisher has the | company chosen the TTO | | |
| | Management Plan Option? Yes NoN/A | | | | |
| | If yes, has a TTO Management Plan been submitted to PVSC for approval? | | | | |
| | YesNoN/A | | | | |
| | If yes, review plan to see if it is still applicable. Write comments below: | | | | |
| | • • | - - | | | |
| | | | | | |

| INDUST | RIAL USER INSPECTION RI | EPORT |
|---|--|--|
| Yes No If y | es, | |
| Type | Amount Stored? | How Used? |
| MCK | 1 dun | Cleaning |
| | | |
| | | |
| | | |
| | | |
| | | |
| | TABLE A Toxic Organic | |
| Acenaphthene | Fluoranthene | 1,12-Benzoperylene (benzo(ghi)perylene) |
| Acrolein | 4-Chloropheyl phenyl ether | Flourene |
| Acrylonitrile | 4-Bromopheyi phenyi ether | Phenanthrene |
| Benzene | Bis (2-chloroisopropyl) ether | 1,2,5,6-dibenzanthracene(dibenzo(a,h)anthracene) |
| Benzidine | Bis (2-chloroethoxy) methane | Indeno(1,2,3-cd)pyrene(2,3-o-phenylene pyrene) |
| Carbon terachloride(tetrachloromethane) | Methylene chloride (dichloromethane) | Pyrene |
| Chlorobenzene | Methyl chloride (chloromethane) | Terachloroethylene |
| 1,2,4 - Trichlorobenzene | Methyl bromide (bromomethane) | Toluene |
| Hexachlorobenzene | Bromoform (tribromomethane) | Trichloroethylene |
| 1,2-Dichloroethane | Dichlorobromomethane | Vinyl chloride (chloroethylene) |
| 1,1,1-Trichloroethane | Chlorodibromomethane | Aldrin (|
| 1,1,2-Trichloroethane | Hexachlorobutadiene | Diedrin - |
| Hexachloroethane | Hexachlorocyclopentadiene | Chlordane (technical mixture and metabolites |
| 1,1-Dichloroethane | Isophorone | 4,4-DDT |
| 1,1,2-Trichloroethane | Naphthalene | 4,4-DDE (p,p-DDX) |
| 1,1,2,2-Tetrachloroethane | Nirrobenzene | 4,4-DDD (p,p-TDE) |
| Chloroethane | 2-Nitrophenol | Alpha-endosulfan |
| Bis (2-chloroethyl) ether | 4-Nitrophenol | Beta-endosulfan |
| 2-Chloroethyl vinyl ether (mixed) | 2,4-Dinitrophenol | Endosulfan sulfate |
| 2-Chloronaphthalene | 4,6-Dinitro-Ocresol | Endrin |
| 2,4,6-Trichlorophenol | N-nitrosodimethylamine | Endrin aldehyde |
| Parachiorometa cresol | N-nitrosodiphenylamine | Heptachlor |
| Chloroform (trichloromethane) | N-nitrosodi-n-propylamine | Heptachlor epoxide |
| 2-Chlorophenol | Pentachlorophenol | (BHC-hexachlorocyclohexane) |
| 1,2-Dichlorobenzene | Phenol | Alpha -BHC |
| 1,3-Dichlorobenzene | Bis (2-ethylhexyl) phthalate | Beta-BHC |
| 1,4-Dichlorobenzene | Butyl benzyl phthalate | Gamma-BHC |
| 3,3-Dichlorobenzidine | Di-n-butyl phthalate | Delta-BHC |
| 1,1-Dichloroethylene | Di-n-octyl phthalate | (PCB-polychlorinated biphenyls) |
| 1,2,-Trans-dichloroethylene | Diethyl phthalate | PCB-1242 (Arochlor 1242) |
| 2,4-Dichlorophenol | Dimethyl phthalate | PCB-1254 (Arochlor 1254) |
| 1,2-Dichloropropane | 1,2-benzanthracene (benzo(a)anthracene) | PCB-1221 (Arochlor 1221) |
| 1.3 - Dichloropropylene (1,3-dichloropropene) | Benzo(a)pyrene (3,4-benzopyrene) | PCB-1232 (Arochlor 1232) |
| 2,4-Dimethylphenol | 3,4-Benzosuoroumhene (benzo(b)ssuoroumhene) | PCB-1248 (Arochlor 1248) |
| 2.4-Dinitrotoluene | 11.12-Benzofluoroanthene (henzo/k)fluoroanthene) | PCB-1260 (Arochlor 1260) |

VIII PRETREATMENT FACILITIES

2,6-Dinitrotoluene

Ethylbenzene

1,2-Diphenylhydrazine

11,12-Benzofluoroanthene (benzo(k)fluoroanthene)

Chrysene

Anthracene

Acenaphthylene

PCB-1016 (Arochlor 1016)

2,3,7,8-tecrachlorodibenzo-p-dioxin (TCDD)

Toxaphene

| a. Is any treatment performed on the wastewater prior to discharge to the public sewer? Yes No | |
|--|---------|
| Describe/Comments: | |
| | |
| b. Does the Company maintain pretreatment equipment maintenance records? Yes_No_N/A_ | |
| b. Does the Company maintain pretreatment equipment maintenance records? Yes_No_N/A_ If no, instruct them to start keeping these records. | • |
| If yes, review them. Are they adequate? YesNo | |
| Explain deficiencies, if any: | |
| | |
| | <u></u> |
| c. Has any additional treatment been installed since the last inspection? Yes NoN/A Is it complete? Yes No N/AWhat percentage has been completed? | - |
| Comments: | |
| | |
| | |
| | |
| Is any further treatment proposed to be utilized on the wastewater prior to discharge to the public sewer? Yes No N/A | |
| Comments: | |
| | |
| | |
| | |
| e. Is the facility operating under a compliance schedule to install treatment or otherwise attain | |
| compliance with applicable standards? | |

INDUSTRIAL USER INSPECTION REPORT N/A____ If no, is facility in compliance? No Comments: f. Boiler Operation (1) Does the company have a licensed boiler operator? Yes____ No____ Note the name(s) of the licensed boiler operator(s) along with the type of license they possess (black seal, blue seal, etc.) My Detruck Is the boiler water treated prior to use? Yes No If yes, what sort of treatment is performed? <u>hater rolleres</u> Is the condensate return from the boiler sewered? Yes___No___ If yes, explain what treatment if any is performed on this discharge. (2) Does the company have a ligensed Industrial Wastewater Treatment Operator? Yes____ No___ If yes, note Class

Note the name(s) of the licensed operator(s) along with the type of license they

IX. Slug Control

(1) Slug Plan

possess. ____

| _ | DUSTRIAL USER INSPECTION REPORT |
|-------------------------------------|--|
| Does the user h | ave a plan to control Slug Discharges? Yes, No |
| | whether the user needs a plan to control "Slug Discharges". Attach |
| - | • |
| | date of approved plan $\frac{5/9}{6}$. Have there been any changes? |
| | |
| none of | evel . |
| | |
| | |
| | |
| | |
| | |
| ocess Areas | |
| Are proce | ess area(s) diked? Yes, No |
| | * |
| - | process areas located near drains (Storm or Sanitary)? Yes, No |
| Are the p | • |
| Are the p | orocess areas located near drains (Storm or Sanitary)? Yes, No |
| Are the p Are tanks Evaluate when | orocess areas located near drains (Storm or Sanitary)? Yes, No, No, No, No, No, ther the company should be required to install dikes or other control |
| Are the p | orocess areas located near drains (Storm or Sanitary)? Yes, No, No, No, No, No, ther the company should be required to install dikes or other control |
| Are the p Are tanks Evaluate when | orocess areas located near drains (Storm or Sanitary)? Yes, No, No, No, No, No, ther the company should be required to install dikes or other control |
| Are the p Are tanks Evaluate whet | orocess areas located near drains (Storm or Sanitary)? Yes, No, No, No, No, No, ther the company should be required to install dikes or other control |
| Are the p Are tanks Evaluate whet | orocess areas located near drains (Storm or Sanitary)? Yes, No, No, No, No, No, ther the company should be required to install dikes or other control |
| Are the p Are tanks Evaluate when | orocess areas located near drains (Storm or Sanitary)? Yes, No, No, No, No, No, ther the company should be required to install dikes or other control |
| Are the p Are tanks Evaluate when | orocess areas located near drains (Storm or Sanitary)? Yes, No, No, No, No, No, ther the company should be required to install dikes or other control |

(3) Handling Procedures

Has the company developed adequate handling procedures to prevent organics or any other

| possibly hazardous materials used during process operations, from reaching the sewer in | | |
|--|--|--|
| amounts exceeding federal standards or which could cause problems to the PVSC treatment | | |
| works? Explain how company personnel are actively implementing these procedures. List | | |
| any deficiencies: This Plan in use ale visite goes their pullslatment | | |
| ale marke goes than nellslatment | | |
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| (4) <u>Training</u> | | |
| Does the company train its employees in the proper handling of process or waste materials? | | |
| YesNo | | |
| If yes, does the company maintain training records? If yes, what is the frequency of training: | | |
| annuel | | |
| | | |
| | | |
| · | | |
| WASTE | | |
| a. Does this company generate any waste process solutions (spent solvents, spent acids, etc)? | | |
| Yes No If yes, note what these materials are, the quantity generated per | | |

 \mathbf{X}

| | month, how they are stored, and how they are disposed of? |
|----------|--|
| | If licensed hauler used, name the company |
| b. | Does this company generate residuals as a result of its Process operations? |
| •• | YesNo If yes, note what the residual are, the quantity generated per month, |
| | how they are stored, and how they are disposed of: landfill |
| | |
| | |
| c. | Does this company generate residuals as a result of its Pretreatment operations? |
| | YesNoIf yes, note what the residual are, the quantity generated per month, |
| | how they are stored, and how they are disposed of: |
| | |
| 1 | Does this company have designated or centralized area (s) for the storage of hazardous |
| | waste? YesNoN/A(No hazardous waste generated). If yes, what |
| | does the company do with their hazardous waste? |
| | Is a copy of the latest manifest(s) attached? Yes No If no, give reason: |
| | nine shipped out |
| : | Are the raw organics and/ or spent organics stored in an area appropriately safeguarded |
| | gainst spills reaching the sewer? YesNo |
| | Storage area observations (describe dikes, containment methods, location of drains, etc.): |
| | segragated area |
| | |
| | |
| | |
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| | |

XI INSTRUMENTATION (Specify outlet number where necessary - Show location of meter(s) on site plan.)

Effluent flow meter (Specify type and reading, Gal., Cubic Feet)

| | Effluent flow meter recorder (Note type, include decimal place) |
|----|--|
| | Are flow meters non-resettable? YesNoNo |
| | Well meter? Yes No |
| | Describe where meters are located |
| | How often are the effluent or flow meters calibrated? When was the |
| | last calibration done? |
| | Are there any internal meters? Yes No |
| | Describe the type (process or sanitary) and where meters are located. |
| | pH meter? Yes No List New Jersey Certification # Clock Not |
| | pH meter? Yes No List New Jersey Certification # dolo not pH recorder? Yes No Note Reading 7 |
| | LEL meter? YesNoNote Reading |
| | pH paper reading of effluent at outlet(s): |
| XI | I <u>SAMPLING PROCEDURES</u> Describe the general condition of the sample point (Is it in a pit, a pipe, etc.? Is it kept clean, safe, etc.?). |
| | |
| | |
| ם | Does the Company have a composite sampler? YesNo |
| | If no, how does the Company obtain samples? |
| 0 | Is the procedure correct, and does it ensure accurate sampling? YesNo |
| | If not, describe what you informed the company to do to correct the problem? |
| | |
| a | Are sample point(s) representative of all industrial discharge(s)that they are required to monitor? YesNo |
| | If not, describe what you informed the company to do to correct the problem? |

| כו | Is Sampler Refrigerated? YesNo How? |
|-----|---|
| | If no, explain how the Company maintains the proper temperature of the sample? |
| | |
| ٥ | If Sampler is operating, note temperature of sample |
| 0 | Can Sampler be sealed? Yes No N/A |
| a | Is Sample Point accessible? YesNoN/A |
| 0 | Does sample point (s) match the one (s) stated in the Sewer Connection Permit? Yes No N/A |
| 0 | Is Sample Hose in the proper place? Yes No N/A |
| | List the types of samples required at this company: Me change botal least |
| 0 | Are any analytical instruments recommended for this company? Yes No: |
| | Which ones? |
| | - - |
| | |
| XI. | II COMMENTS - (Use another sheet if necessary) |
| | to change in Hen process since |
| | ou last inspection |
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| XIV INSPECTO | R(S) | | | |
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| Title: | ~ On mon to | PW . 4 | | |
| i iue: | O MARCH | Title: | | |
| Signa | ture: 4/gells | Signature: | | |
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| гт ера | red By: # 4CFOOO | 70 | ~ 1 | |
| Revie | wed By Court Hay | Date Review Complete | : S/22/00 | |
| o. | Les Much A. C. | _ | 1 | |
| Signa | Ture Cary | | ′ | |
| Revised 11/98 | () | | | |

DEQ-094 9/99

COMMUNITY RIGHT TO KNOW SURVEY FOR 1999

For State and Federal Community Right to Know Reporting

| | THIS PAG | GE MUST BE COMPLETED, S | IGNED, AND RETURNED. | |
|---|---------------------------|--|--|--|
| Please type this form. | 1 | A Facility Location - complet | ion is mandatory | |
| 17272100000 3545 | | 17272100000 | 0217 | |
| ATTN LAWRENCE GIBSON SANDVIK INC 1702 NEVINS ROAD P O BOX 428 FAIRLAWN NJ 07410-0428 | | SANDVIK INC 1702 NEVINS RD FAIR LAWN NJ 07410 | -()428 | |
| | | Name, Street, City, State an | d Zip MUST BE PROVIDED | |
| See in | structions if information | on these forms is incorrect | | |
| Does this facility Produce, Store, Environmental Hazardous Substa Table A: | | D Numb | per of employees at facility 250 | |
| in any quantity? Darken either yes or no | box Yes | No E Numb | er of facilitles in New Jersey | |
| 2. above thresholds? Darken either yes or no | box Yes | | al EIN 272100000 | |
| Briefly describe the nature of the this facility: | | exem | are claiming an R&D lab ption for this facility, enter approval number here. | |
| Machine tool main | tucturing_ | | | |
| Check box if facility is reporting porting porting to Know Act (EPCRA/SARA | | n 312 of the Federal Emergenc | ry Planning and Community | |
| FACILITY EMERGENCY CONTA | СТ | | | |
| Name ALBERT DIETRICH | Title I | MAINTENANCE SUPRV | | |
| Facility Phone Number (201) 7 | 94-50 00 Emerge | ency Contact Phone Number (| 201) 794-5104 | |
| | | oxes A, D, E, I or J has change | d (Electronic Submittal Only | |
| since your last submitta | 11. | | Password | |
| CERTIFICATION OF OWNER/OPERATOR OR AUTHORIZED REPRESENTATIVE — I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information strue, accurate, and complete Fax # (20) 794 – 5049 Signature Date 2/2/00 Phone # 201) 794 – 5313 Name ANDERS HILLMAN Title PLANT MANAGER | | | | |
| RETURN SIGNED ORIGINAL TO: NJDEP Community Right To Know Survey PO Box 405 Trenton, NJ 08625-0405 | | to send copies of this survey of the instruction guide. You | · · · · · · · · · · · · · · · · · · · | |

172721-0-0000 0217

SANDVIK INC 1702 NEVINS RD FAIR LAWN NJ 07410-0428

PART 2 1999 CHEMICAL INVENTORY REPORT

Reporting Period: January 1 - December 31, 1999

Please type all responses

Photocopy this page if you need additional forms Read instructions carefully before completing this form

| | | | | |
|---|--|---|------|--|
| SUBSTANCE DESCRIPTION | HAZARDS (Check all that apply) | INVENTORY INFORMATION | NC | |
| Name Phosphoric acid Substance Number 1516 CAS Number 7664-38-2 DOT Number 1805 Pure () or Mixture (X) Check one Solid () Liquid (X) or Gas () Cr Trade Secret. (=) Check if claiming | | Avg Daily inventory Days on site Storage pressure Storage temperature 72 365 01 09 | | |
| Name Sulfuric acid Substance Number 1761 CAS Number 7664-93-9 DOT Number 1830 Pure () or Mixture (X) Check one Solid () Liquid (X) or Gas () Ch Trade Secret () Check if claiming | () Fire () Sudden release of pressure (X) Reactive (X) Acute health effects () Chronic health effects reck one () None per MSDS Location(s) | Container Type Max Daily inventory Avg Daily inventory Days on site Storage pressure Storage temperature Container Type 72 7365 765 765 | | |
| Name Heating 0.1 Substance Number 2 444 CAS Number 1993 Pure (X) or Mixture () Check one Solid () Liquid (X) or Gas () Ch Trade Secret () Check of claiming | (X) Fire () Sudden release of pressure () Reactive () Acute health effects () Chronic health effects eck one () None per MSDS Location(s) Front of Coa | Avg Daily inventory Days on site Storage pressure Storage temperature 75 765 765 775 775 775 775 775 | | |
| Name | (X) Fire () Sudden release of pressure () Reactive (X) Acute health effects () Chronic health effects eck one () None per MSDS Location(s) 66 - Warehoo | Avg Daily inventory Days on site Storage pressure Storage temperature 7/ 365 01 04 | | |
| Name COBOLT () Fire Container Type Substance Number C520 () Sudden release of pressure Max Daily inventory CAS Number 7470-48-4 () Reactive Avg Daily inventory DOT Number (X) Check one (X) Chronic health effects Storage pressure CI Solid (X) Liquid () or Gas () Check one () None per MSDS Trade Secret () Check if claiming Location(s) Plant Wide | | | | |
| CONTAINER CODES AND DESCRIPTIONS TA Accive ground tank BA Bag Below ground tank BX Box T1 Tank inside building CY Cytinder DS Steel drum BG Bottles of jugs (plass) DP Plastic drum BP Bottles of jugs (plassic) DF Fiber drum BN Tote bin CN Can TW Tank wagon CS Carboy RC Railcar SI Silic OT Other (describe) | 20 Greater than 10 million pounds 19 1 000 001 to 10 million pounds 18 500 001 to 11 million pounds 17 250 001 to 500 000 pounds 18 100 001 to 250 000 pounds 19 10 001 to 100 000 pounds 14 10 001 to 50 000 pounds 14 10 001 to 50 000 pounds 15 30 001 to 100 000 pounds 16 10 10 100 pounds 17 10 10 1000 pounds 18 10 10 1000 pounds 19 10 10 1000 pounds 10 10 10 pounds 10 10 10 pounds 10 10 10 pounds 10 10 10 pounds | nan ambient pressure n ambient pressure | .064 | |

172721,00000 0217

SANDVIK INC 1702 NEVINS RD FAIR LAWN NJ 07410-0428

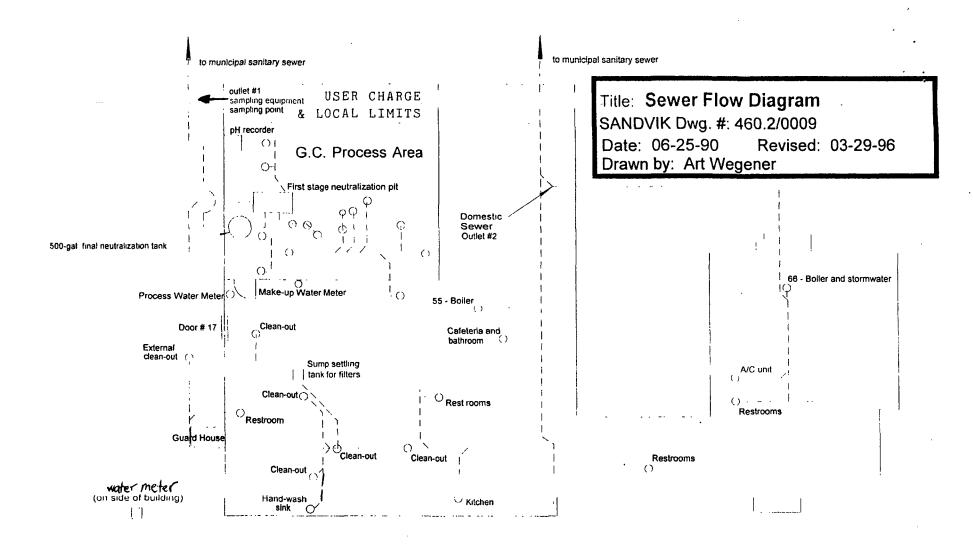
PART 2 1999 CHEMICAL INVENTORY REPORT

Reporting Period: January 1 - December 31, 1999

Please type all responses

Photocopy this page if you need additional forms
Read instructions carefully before completing this form

| | i | | | | |
|---|---|--|------------------------------------|--|--|
| SUBSTANCE DESCRIPTION | HAZARDS (Check a | II that apply) INVENTORY INFO | RMATION | | |
| Name Hydrogen Cloride Substance Number 2909 CAS Number 7647-01-0 DOT Number 1050 Pure (X) or Mixture () Check one Solid () Eliquid () or Gas (X) Ch Trade Secret () Check if claiming | (X) Sudden release () Reactive () Acute health eff (X) Chronic health | Avg. Daily inventory fects Days on site effects Storage pressure Storage temperature | C Y 13 12 365 02 04 | | |
| Name Hydrog en Substance Number 1010 CAS Number 1333-74-0 DOT Number 1049 Pure (X) or Mixture () Check one Solid () Liquid () or Gas (X) Check of Claiming | (X) Fire (X) Sudden release () Reactive (X) Acute health eff () Chronic health e | Container Type of pressure Max Daily inventory Avg Daily inventory ects Days on site effects Storage pressure Storage temperature | 7.4 13 13 365 02 06 | | |
| Name Mothic New Substance Number 1202 CAS Number 74-82-8 DOT Number 1971 Pure (X) or Mixture () Check one Solid () Liquid () or Gas (X) Check if claiming | (X) Fire (X) Sudden release () Reactive () Acute health effe () Chronic health 6 | Container Type of pressure Max. Daily inventory Avg Daily inventory ects Days on site effects Storage pressure | CY 12 12 365 02 04 | | |
| Name <u>Istanium</u> tetrach Substance Number 1864 CAS Number <u>7550-45-0</u> DOT Number <u>1838</u> Pure (X) or Mixture () Check one Solid () Liquid (X) or Gas () Che Trade Secret: () Check if claiming | () Sudden release () Reactive () Acute health effe () Chronic health e | Avg. Daily inventory ects Days on site storage pressure | СУ 13 13 365 02 04 | | |
| Name | | | | | |
| CONTAINER CODES AND DESCRIPTIONS TA Above ground tank BA Bag Below ground tank BX Box TI Tank inside building CY Cylinder CS Steel drum BP Bottles of jugs (glass) DP Plastic drum BP Bottles of jugs (plass) DF Fiber drum BN Tole bin CN Can TW Tank wagon CB Carboy RC Raicor SI Silo OT Other (describe) | 20 Greater than 10 million pounds 19 1 000 001 to 10 million pounds 18 500 001 to 1 million pounds 18 500 001 to 1 million pounds 16 100,001 to 500 000 pounds 16 100,001 to 250 000 pounds 15 50 001 to 100 000 pounds 14 10 001 to 50 000 pounds 14 10 001 to 50 000 pounds 15 10 10 10 10 000 pounds 16 10 10 10 000 pounds 17 10 10 pounds 18 11 to 10 pounds 19 1 to 10 pounds 19 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds 10 1 to 10 pounds | STORAGE TEMPERATURE AND PRESSURE Coressure. O1 Ambient pressure O2 Greater than ambient pressure O3 Less than ambient pressure Immorature O4 Ambient temperature O5 Greater than ambient temperature but not cryogenic (freezing conditions) O7 Cryogenic conditions (less than -200 C) *Ambient means "normal " "surrounding," or "roor conditions. | | | |



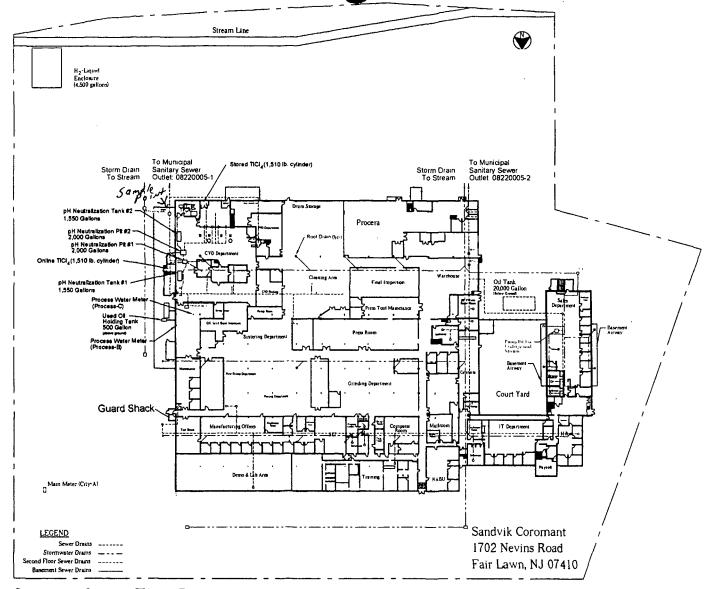
Outlet Designation #:
Outlet # 1: 08401681-18055-0081 - 8 inch - Industria

OUTLET #2 08401682-18055-0081-10 inch - Domestic

SANDVIK AIR STACK PERMITS

| NJDEP Stack # | Description. | Sandvik stack | Permit : | ¥ |
|------------------|-----------------------------|----------------|----------|------------------------------------|
| 1 | GC Scrubber #1 | 40 | 069006 | |
| 2 | Line 40, line 30 | 12, 13, 15, 16 | 077770 | |
| 3 | DMK #3 | 5, 8 | 077771 | |
| 4 | -Open- | | | |
| 5 | -Open- | | | |
| 6 | Wendt oil mist collector | 1 | 077774 | |
| 7 | T&B oil mist collector | 3 | 077775 | |
| 8 | -Open- | | | |
| 9 | Agathon oil mist collector | 2 | 094220 | |
| 10 | DMK #4 | 7, 9 | 077778 | |
| 11 | Line 50 | 12, 14, 17, 18 | 077779 | |
| 12 | -Open- | | | |
| 13 | -Open- | | | |
| 14 | DMK #2 | 23, 24 | 097566 | |
| 15 | DMK #1 | 21, 22 | 097567 | |
| 16 | Finishing depart. (Bulldog) | 6 | 099811 | (Permit no longer needed 12/15/94) |
| 17 | Boro up-blast fan | 20 | 099526 | |
| 18 | Breakdown table | 26 | 100681 | |
| 19 | Metco flame spray | 25 | 101228 | |
| 20 | Ella scrubber | 28 | 120963 | |
| ? | Line 10 | 42, 44 | | |
| ? | GC Scrubber #2 | 43 | | |
| N/A | Dust coll. rm. up-blast fan | 27 | N/A | (Permit not needed 12/27/94) |

C:\Safety \Air-pnc.doc



Sanitary Sewer Flow Diagram



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HUIZENG J D RIBBON CORP 20-21 Wagaraw Rd-HA 7-6336
          Narrow Fab Mills Cotton Wool Silk Synth 2241
  Pres-Mettle Hulzeng, Sec-Tr-Emil J. Goering
JO ANN SHOE MFG CO INC 20-21 Wagaraw Rd-HA 7-0067
          Leather Silppers 3142
  Pres-G. Frier, Sec-M. Nadler, Tr-M. Morrison
KEM MFG CO INC 20-21 Wagaraw Rd-HA 7-2800
Motor Vehicla Parts Access New Reconditioned 3714
       O/M—M. Friedman
  KIMBALL PRESS 22-01 Raphael St-FA 6-0242
       M-18 F-3
          Commercial Printing 2751
  Owner—Edward Kimball
KUIKEN BROS CO INC 13-44 6th St—FA 6-2082
          Millwork Plants 2431
       Pres-Richard Kulken, Sec-Edward Kulken, Tr-Richard
  LANDZETTEL & SONS 17-18 River Rd-FA 6-3500
         Paints Varnishes Lacquers Japans Enamels 2851
       Partner-William Landzettel, Walter Landzettel, Henry
       Landzettel
  LAURIE DON INC 16-16 Maple Ave-FA 6-5026
         Narrow Fab Mills Cotton Wool Silk Synth 2241
       Pres-Daniel Laurie, Sec-George E. Border, Tr-Ella
       laurie
 LEE MILLWORK CORP 4-21 Banto PI-FA 4-2400
      M-57 F-3
Millwork Plants 2431
       Pres-Benjamin Lee, Sec-Anne L. Widetsky, Tr-Benjamin
 MARINE CRAFTERS INC 1300 Plaza Rd-FA 6-8012
       Heat Cooking Apparatus Except Electric Nec 3439
Pres—Thomas A. Connely, Sec—Helen W. Connely, Tr—
       Mary B. Kelly
 NATIONAL PRODUCTS CORP 1300 Plaza Rd-FA 4-4266
      Other Automobile Repair 7539
Pres-R. Roehrich, Sec-Tr-H. Pfeiffer
 PEERLESS FINISHING CORP 20-21 Wagaraw Rd
      M-10
        Dyeing Finishing Textiles Except Wools 2261
      Pres—T. Zorello, Sec—B. Fire, Tr—S. Vinci
Main Office Paterson Passaic County
 PHOENIX MOIRE CO INC 20-21 Wagaraw Rd-HA 7-6446
      M-11 F-3
         Yam Mills 2221
 Pres—B. Fire, Sec-Tr—T. Zarello
RENCO FINISHING CORP 20-21 Wagaraw Rd—FA 6-5600
M-15 F-1
Dyelng Finishing Textiles Except Wools 2261
Pres—A. V. Rento, Sec-Tr—J. Zavagila
SANDVIK STEEL INC 1702 Nevins Rd—FA 4-6200
      M-69 F-79
     Steel Springs 3493

Pres—Carl Hildebrand, Sec—Francis Kunzinger, Tr—Arthur
C. Dyke, P/E—Arthur W. Morsi
 SMITH ROBINSON INC River Rd-FA 6-5115
        Millwork Plants 2431
      Pres-Frank H. Smith, Sec-Tr-Howard G. Robinson
TEX CHEM CO 20-21 Wagaraw Rd-HA 7-3344
      M-8 F-1
        Intermediates Dyes Color Lakes Toners 2822
      Partner—Charles Sabriskie, A. Tannenbaum, Robert Gilman, P/M—Jack Koenig
THERMO ELECTRIC CO INC 22-02 Raphael St-HU 9-5800
     Insulated Wire Cable 3631
Main Office Saddle River Twp Bergen County
U S SUPPLY COMPANY 20-21 Wagaraw Rd-HA 7-5960
      M-21 F-1
        Hair Work 3994
Pres_M. Levine, Sec.—M. Isaac, Tr.—A. Levine
VISUAL SALES CO 1-10 3rd St.—FA 6-3108
Partitions Shelving Locker Office Store Fix 2541
Owner—M. Shore, Gen Mgr—M. Lichtman
WARREN FOUNDRY 13-28 2nd St—FA 6-0841
     Nonferrous Foundries 3361
Owner—Cyril Smith
```

ZEREGAS A SONS INC 2001 Broadway

Macaroni Spaghetti Vermicelli Noodles 2098

Pres-F. L. Zerega, Sec-A. Vermylon, Tr-J. Zerega

M-53 F-32

```
FAIRVIEW (Boro). Inc De 1894. Pop 1940 8,770; 1950 8,661. Elev 10-318 ft 8 sq min 147 acres and 3,184 lots. Net valuation $9,50-633. Tax rate $6.72. Fire insurance rating D; protection 4 vol cos (87).

In southeastern end of county, bounded north and west by Ridgefield, east by Cliffside Park, south by North Bergen (Hudson County). Railroads Erle R. R., N. Y., Susquehanna & Western R. R. Express agency. Banking town Cliffside Park. Schools 3 public, 1 junior high (1,008), 43 teachers. Police 1 chief, 1 captain, 1 lleutenant, 1 sergeant, 16 patrolmen, 8 special officers, 1 patrol car with short wave radio, 1 ambulance. Water supplied by Hackensack Water Co. Building code, 1929; zoning ordinance, 1928.
         nance, 1928.
   INDUSTRIAL FIRMS:
  A & G EMBROIDERY CO 500 CHI St-CL 6-0441
 Hand Embrolderies Scallop Cutting 2398
Owner—G. Troist, E. Mastropolo
ABBEY EMBROLDERY CO INC 232 Kamena St
 Schiffil Machine Embroiderles Only 2397
Pres—E. Pozzetti, Sec-Tr—M. Hoffman
ACCLAIMED EMBROIDERY MFG CO INC 436 Walker St—CL
         6-1043
         M-1 F-2
 Schiffil Machine Embroideries Only 2397
Pres—S. Kreshover, Sec-Tr—M. Cresciteili
AIRMATIC SYSTEM INC 378 Bergen Blvd—CL 6-0475
         M-28 F-3
 Machine Shops Jobbing and Repair 3599
Pres—W. L. Weigele, Sec—R. R. Gordon, Tr—W. L. Weigele
Jr., P/F—V. Soleo
ALISAN CORPORATION 333 Bergen Blvd
 Schiffil Machine Embroideries Only 2397
Pres—I. Biberfeld, Sec—A. Biberfeld, Tr—A. Biberfeld
ANIELLO EMBROIDERY CO INC 18 Industrial Ave
            Schiffil Machine Embroideries Only 2397
         Pres-J. A. Urscheler, Sec-A. Sorrentino, Tr-E. Schwerz-
 ANRIG ROBERT J 472 Cliff St
            Schiffil Machine Embroideries Only 2397
         Owner-R. J. Anrig
 ANTONIETTI L EMBROIDERY WORKS 369 Henry St
        Hand Embroideries Scallop Cutting 2398
Owner-L. Antonietti
Branch No Bergen Hudson County
 APOLLO ENBROIDERY LIMITED 207 Anderson Ave-CL 6-4205
        Schiffli Machine Embroideries Only 2397
Partner-W. Golub, J. Golub, H. Golub
 AVON KNITTING MILLS 688 W Prospect Ave-CL 6-9200
           Knit Fabric Mills 2256
         Owner-C. Avon, V. Avon, F. Schweighofer, P/M-F.
         Matchulat
 B & A EMBROIDERY CO 465 CIIff Street-CL 6-7522
       M-6 F-4
Schiffi Machine Embroideries Only 2397
        Owner-B. Tomasini
 BASILE EMBROIDERY CO INC 444 Walker St
           Schiffil Machine Embrolderies Only 2397
        Pres-P. Basile, Sec-Tr-P. Basile
 BELLMAN BROOK BLEACHERY CO Fairview Ave
         M-408 F-75
           Dyeing Finishing Textiles Except Wools 2261
        Pres-J. Ward, Sec-Tr-N. E. Yale, S/D-H. C. Sabonilan
 BENDLER EMBROIDERIES 418 Edgewater Rd-CL 6-4588
           Hand Embroideries Scallop Cutting 2398
       Owner-O. Bendler
 BOESCH & BOESCH EMBROIDERY WORKS 425 Henry Street-
       CL 6-1072
        M-3 F-2
Schiffi Machine Embroideries Only 2397
Owner—V. Boesch, J. Boesch
BRIAR ARDEN CORP 369 Henry St
       Tobacco Pipes Cigarette Holders 3996
Pres—A. Passante, Sec—N. Costatino
 BRODY LEONARD INDUSTRIES 365 Henry St
          Machine Tool Accessories Precision Tools 3543
       Owner-L. Brody, P/F-M. Zabicki
BROTHERS EMBROIDERY CO 489 CIIff Street-CL 6-7523
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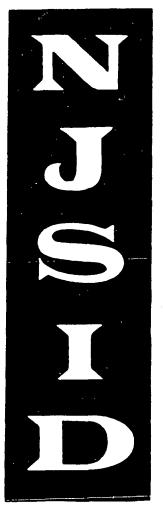
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Schiffil Machine Embroideries Only
      Pres-S. Peristein, Sec-Tr-W. Perist
CHAMPAGNE KNITTING MILLS INC 132 Bergen Blvd-CL 6-2990
       Knit Fabric Mills 2256
Pres Marvin Gutschmit, Sec-Morris Rosenstrauch, Tr-
Irein Cohen
CHIC EMBROIDERY CO 369 Henry St-CL 6-0865
       Hand Embroideries Scallop Cutting 2398
Owner—Rudoif Luettger Jr., Charles Anderogg, Charles
 CLIFFSIDE EMBROIDERY CO 367 Delana Place-CL 6-1039
        Hand Embroideries Scallop Cutting 2398

Partner—Maddalena Filippi, Gino Filippi, Bruno Filippi,
  Angelo Filippi
CLIFFSIDE THREAD & SCALLOP CUTTING CO 228 Anderson Ave
         CL 6-4371
M-3 F-10
  Cutting Rooms Cloth Cutting for Trade 2313
Partner—Howard Pfelffer, Fred Pfelffer
COLONIAL METALLIZING CO 204 Bergen Blvd—CL 6-1352
  M-4 r-2 Electroplating Plating and Polishing 3468
Partner—R. Imbelloni, S. Imbelloni
CUTLER BROS BOX & LUMBER CO 711 West Prospect Ave—CL
    Moden Boxes Skids Pallets Etc 2444
Partner L Cutler, L Cutler, M. Cutler
D & L QUILTING CO 149A Anderson Ave
    M-1 F-1
Housefurnishings Quilts Quilting Etc 2392
Partner—Liborio Doralo, Dominic Lombardo
DANNER FRANK & SON 41 Anderson Ave—CL 6-0996
    M-1 F-2
Schiffil Machine Embroideries Only 2397
Partner—Gertrude Danner, Frank Danner, Frank P. Danner
DIAMENT EMBROIDERY WORKS 149-B Anderson Ave—CL 6-0358
               Hand Embroideries Scallop Cutting 2398
     Owner-Leib Diament
DOERIG EMBROIDERY CO INC 97 Anderson Ave
     M-/ F-4
Schiffil Machine Embrolderies Only 2397
Pres—Jacob Doerig Jr., Sec-Tr.—Walter Doerig
DOMPIERI BROTHERS 26 Industrial Ave—CL 6-3177
      M-3 r-1
Schiffil Machine Embroideries Only 2397
Partner—Alfred Domplerl, Dominic Domplerl
E & D EMBROIDERY CO 149-B Anderson Ave—CL 6-0358
      Partner—Abram Erlich, Leib Diament
ESQUIRE EMBROIDERY CO 483 Cliff St
       M-2 F-3
Hand Embroideries Scallop Cutting 2398
Partner—Edward F. Garrett, Gerald Miller
Branch Cilffside Park Bergen County
EYERGREEN EMBROIDERY CO INC 500 Cliff St—CL 6-2751
       Hand Embroideries Scallop Cutting 2398
Pres—Edward Bauer, Sec—John Bauer, Tr—Elizabeth Bauer
FAIRCLIFF EMBROIDERY CO INC CIIT & 9 Aves
                   Schiffil Machine Embroideries Only 2397
               Pres-D. Krieger, Sec-B. Krieger, Tr-T. Cohen, P/M-
        R. McEnan
FASHION EMBROIDERIES 36 Industrial Ave—CL 6-2949
                   Hand Embroideries Scallop Cutting 2398
         Owner—S. Katz, P. Euler
FEHR JACOB 41 Anderson Ave—CL 6-0307
         Schiffil Machine Embrolderies Only 2397
Owner—J. Fehr
FROSH FLUORESCENT CORP 203A Broad Ave
      Lighting Fixtures 3471
Pres—E. J. Frosh, Sec-Tr.—B. Frosh
CFULTON EMBROIDERY CO 182 Fulton Ave
                     Hand Embroideries Scallop Cutting 2398
          Owner—A. Romano
GEHWILER THOMAS 24 Industrial Ave—CL 6-9064
                     Schiffil Machine Embroideries Only 2397
                  Owner-T. Gehwlier
        GENERAL THREAD & SCALLOP CUTTING CO 8 Industrial Ave
                     Trimmings Stamped Art Gootis Needlework 2396
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Pr-Raymond C. Lotz
Exec/VP-Robert A. Hammell
Sec-Tr-F. Alan Shute

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Div. of: Miehle Gross
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Phone: 791-4500
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Emp: Office M 35, F 6
Plant: M 85
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Grophic Arts Industry
SIC 3535
Pr-Owen L. Gore
Pers-R. Slatkin
R/D-C. P. Strakosch
P/M-W. Schwalm

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Phone: 427 - 2800
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Pr-Louis D. Brown
VP-D. D. Brown
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P/M-J. Filippone

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Displays
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Pr-Norman Cohen

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791 - 2141
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Emp: 500

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New York, N. Y. 10022

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44,000 Sq. Ft.
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Plant: M 40, F 10
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VP-Tr-Harold R. DeJager
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Plant: M 20
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Pr-A. Renco
VP-J. Zavaglia

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Sec-Tr-George E. Chilton
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Emp: 150
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SIC 3141
Pr-M. N. Neirich

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22-02 Raphael Street
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Emp: 25
Temperature Measuring Systems
and Components
SIC 3821
Pr-Fred S. Walter
Main Office:
Saddle Brook, N. J.

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Phnoe: 427 - 6522
Emp: 10
Textile Chemicals
SIC 2819

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Phone: 797 - 1400
Office: M 21, F 5
Plant: M 73, F 50
Macaroni and Egg Noodle
Products
SIC 2098
Ch/B-Antoni Z. Vermylen
Pr-Paul A. Vermylen
VP-Louis C. Galasso

Sec-Tr-Donald A. Zierold

ZEREGA'S, A. SONS, INC.

FAIRVIEW Telephone Area Code—201

Inc.—Dec. 19, 1894
Population 1960 9,399
Elev.—Ft. 10-318
Area—0.8 Sq. Mi.
Net Val.—\$75,333,027
Tax Rate Per \$100—\$2.41
Ratio Of Assessed To True Value
Of Real Property—75.76 pct.
Fire Ins. Rating—D

ALLIED EMBROIDERY 155 Bergen Baulevard Fairview, N. J. 07022 Phone: 945 - 7935 Emp: 18 Embroidery SIC 2397

AMERICAN UNIFORM HEADWEAR CO.
36 Anderson Avenue
Fairview, N. J. 07022
Phone: 943 - 0143
Emp: 10
Uniform Headwear
SIC 2352

APOLLO EMBROIDERIES, LTD.
207 Anderson Avenue
Fairview, N. J. 07022
Phone: 943 - 4205
5,000 Sq. Ft.
Plant: M 6, F 3
Manufacturing of Embroidery and
Lace
SIC 2397
Pr-Joseph Golub
Sec-William Golub
Ir-Hannah Golub

AVON KNITTING MILLS
688 West Prospect Avenue
Fairview, N. J. 07022
Phone: 943 - 9200
Emp: M 45, F 10
Knit Fabric Mills
SIC 2256
Partners-C. V. Avon
V. C. Avon
F. Schweigofer
E. Rahmer

AZTEC EMBROIDERY COMPANY
481 Cliff Street
Fairview, N. J. 07022
Phone: 943 - 2451
Emp: 10
Schiffli Embroidery
SIC 2397
Owner-G. Miller

B & A EMBROIDERY CO.
463 Cliff Street
Fairview, N. J. 07022
Phone: 943 - 1450
Emp: M 9, F 4
Embroideries
SIC 2397
Owner—Bruno Tomasini
P/M—Renato Tomasini

BELL ART EMBROIDERY, INC.
12 Industrial Avenue
Fairview, N. J. 07022
Phone: 954-2800
Emp: 10
Schiffli Embroidery
SIC 2397

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fairview, N. J. 07022
Phone: 946 - 8181

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Emp: 30

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Embroidered Military Insignic
and Commercial Emblems

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Exec/VP-Isidor Biberfeld
VP-Vincent Gromuglia
Tr-Anna Biberfeld

CLIFFSIDE THREAD & SCALLOP CUTTING COMPANY 213 Anderson Avenue Fairview, N. J. 07022 Phone: 943 - 4371 Emp: M 3, F 10 Cutting Rooms, Cloth Cutting SIC 2395

Partners—Howard Pfeiffer

Fred Pfeiffer

CLIFFSIDE EMBROIDERY CO.
367 Delano Place
Fairview, N. J. 07022
Phone: 943 - 1039

Emp: 15

Emp: Embroidery SIC 2397

CONTINENTAL FABRICS CORP.
\$10 Jersey Avenue
Fairview, N. J. 07022
Phone: 943-9124
Emp: 15
Schiffli Machine Embroideries
\$1C 2397
Pr-Werner Vogel
Sec-H. Klein

COREY EMBROIDERY FINISHING 319 Tenth Street Fairview, N. J. 07022 Phane: 945 - 6322 Emp: 7 Embroidery SIC 2396

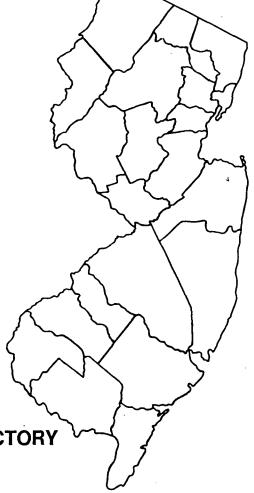
Partner-F. Coviello

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SIC 3551 EMAT CO., INC. 20-21 Wargaw Road Fair Lawn, N.J. 07410 Phone: 427-3173 Emp: 25 ★Special machinery SIC 3559 ENGINE REBUILDERS CORP. OF **AMERICA** 18-02 River Road Fair Lawn, N.J. 07410 Phone: 796-2115 16,000 Sq. Ft., 5.3 Acres Emp: 73 Office: M 6, F 1 Plant: M 66 Remanufactured automobile engines SIC 3519 Pr-John Roehrich VP—T.C. Devona Sec—Francis D. Murphy O/M-A. Mcdermott S/M—G. Gambuti P/A-Patrick Zuccola Pers/M-John Diessner P/M---John Moccio FAIR LAWN BINDERY, INC. 20-10 Maple Avenue Fair Lawn, N.J. 07410 Phone: 427-8020 Emp: 50 Pamphlet binding SIC 2789 Pr—F. Tortorelli VP-P.J. Tortorelli FISHER SCIENTIFIC CO. Chemical Manufacturing Div. 1 Reagent Lane Fair Lawn, N.J. 07410 Phone: 796-7100

75,000 Sq. Ft.; 9 Acres Emp: 210 Office: M 58, F 26 Plant: M 126 *Laboratory and reagent chemicals SIC 2818 VP-James B. Philip S/M-William J. Recker Pers/M—Virginia M. Head R/D—Bernard McSally P/Eng-Carl J. Vogel FOAM FIRRE CORP.

20-10 Maple Avenue Fair Lawn, N.J. 07410 Phone: 427-7653 Emp: 70 Office: M. 1, F.6 Plant: OM 62, F 1 Laminators and bonders SIC 2295 Pr-David Pall

FORSMAN, C.H. CO., INC. 20-01 Pollitt Drive Fair Lawn, N.J. 07410 Phone: 797-9100 Emp: 60 Office: M 5, F 6 Plant: M 46, F 3 Color printing, cartons and wraps SIC 2752 Ch/B-J.H. Forsman Pr-P.E. Forsman VP-P. E. Forsman, Jr. Sec-W. Kruse Comp---R. Wojcik

FRANCIS, CHARLES PRESS 20-10 Maple Ave. Fair Lawn, N.J. 07410 Phone: 423-1900 Emp: 75 Printing SIC 2752

GENTRY INTERNATIONAL, INC. 17-01 Nevins Road Fair Lewn, N.J. 07410 Phone: 791-7100 Emp: 152 ★Seasonings, essential oils SIC 2099

Ch/B-Marne Obernauer Pr-Roderick J. West VP-John Bowers

VP-Max Goldman Comp—John Landgrover S/M—E. Pat O'Connell P/A—Keith Mantell Pers/M-Rose Bucci R/D-Dr. Sheldon Rennert P/M-Mark Buchheim

GLEN ROCK LUMBER & SUPPLY CO., INC. Route 4 and Erie R.R. Fair Lawn, N.J. 07410 Phone: 796-4500 80,000 Sq. Ft., 2.75 Acres Emp: 56 Office: M 12, F 8 Plant: M 36 Lumber, Plywood SIC 2431 Pr-E.B. Leone VP—George H. Muller VP—Frank Pugliese Sec-Chet Boreck

HERSEY-SPARLING METER CO. 2 Fairlawn Ave. Fairlawn, N.J. 07643 Phone: 489-0707 Emp: 10 Meters and controls SIC 3821

IMPRINT ART PRODUCTS INC. 14-01 Maple Avenue Fair Lawn, N.J. 07410 Phone: 797-2500 20,000 Sq. Ft. Emp: 50 Office: M 2, F 4 Plant: M 22, F 22 Decals, pennants, bumper strips, place mats, coasters SIC 2751 Pr-Ted Scarlet VP-Rosalind Scarlet S/M—Stanley Harris A/M-Arturo Moreno

JEWEL ELECTRIC PRODUCTS, INC. Sub. of: Duro-Test Corp. 17-10 Willow Street Fair Lawn, N.J. 07410 Phone: 797-8300 200,000 Sq. Ft., 10 Acres Emp: 100 Incandescent, Flourescent, & Mercury Vapor Lamps SIC 3641 Pr-S. Manni VP—F. A. Weisbecker Tr—F.A. Weisbecker S/M—R. J. Swanson A/M—R. King

P/A-Renee Leftwich

KEM MANUFACTURING CO., INC. Aff. of: M.T.L., Inc. P. O. Box 351, Maple Ave. And River Fair Lawn, N.J. 07410 Phone: 427-2800 85,000 Sq. Ft.; 7 Acres Emp: 188 Office: M 53 F 22 Plant: M 60, F 53 ★Fuel pumps, ignition parts, fuel filters **♦SIC 3561** Pr—Dennis D. Brown VP—Howard M. Brown VP—A. Heymann Comp—M. Rosenthal P/R—S. Paci

M/M-Joseph Wieland KIMBALL PRESS 22-01 Raphael Street Fair Lawn, N.J. 07410 Phone: 796-0242 Emp: 21 Commercial printing SIC 2751

P/A-S. Povanda

T/M-A. Tampsick

R/D-Sidney Frier

Ch/Eng-Carl G. Nelson

LANDZETTEL & SONS 17-12 River Rd. Fair Lawn, N.J. 07410 Phone: 796-3500 15,000 Sq. Ft., 1.5 Acres Emp: 20 Office: M 13, F 1 Plant: M 6 Paint SIC 2851 Pr—Walter Landzettel

VP-Donald J. Landzettel VP-Robert W. Landzettel

Sec-Walter J. Landzettel, Jr. Tr-Eugene F. Gierisch LEE MILLWORK CORP. Div. Of: Banta Millwork Co. 4-21 Banta Place Fair Lawn, N.J. 07410 Phone: 797-2400 Emp: 25 Bow windows

SIC 2431 LENS, DOROTHY B., INC. 20-21 Wagaraw Rd. Fair Lawn, N.J. 07410 Phone: 427-1505 Emp: 16 Fabric kits SIC 2269 Pr-Alfred Domenick LONZA, INC.

Sub. of: Lonza, Ltd. 22-10 Rt. 208 Fair Lawn, N.J. 07410 Phone: 791-7500 Chemicals Pr-Bernard D. Allen MERIT DISPLAYS CORP. 4-19 Banta Place Fair Lawn, N.J. 07410

Phone: 797-8800 Emp: 71 Wooden cabinets, advertising displays SIC 2511 Pr-Norman Cohen MODERN AIR CO., INC.

Fair Lawn, N.J. 07410 Phone: 791-2141 Emp: 8 Sheet metal ductwork SIC 3444 Pr-Roy Praschil MOIRE CORPORATION OF **AMERICA** 20-21 Wagaraw Road Fair Lawn, N.J. 07410 Phone: 427-6446 Emp: 20

4-17 Banta Place

MONROE CALCULATOR CO., Div. Of: Litton Industries 28-04 Broadway Fair Lawn, N.J. 07410 Phone: 797-7900 3,000 Sq. Ft. Emp: 25 Office: M 22, F 3 Desk top computers, calculators

Silk, rayon, acetate yarns

SIC 2281

SIC 3579

G/M-William J. Murphy NABISCO, INC 2211 Route 208 and McBride Ave Fair Lawn, N. J. 07410 Phone: 797-6800 746,746 Sq. Ft., 40.4 Acres Emp: 2,000 **★**Cookies and crackers SIC 2052

OXFORD UNIVERSITY PRESS, INC. 1600 Pollitt Dr. Fair Lawn, N.J. 07410 Phone: 796-8000 87,000 Sq. Ft., 5 Acres Emp: 152 Office: M 18, F 84

Plant: M 38, F 12 Scholarly books ▼SIC 2731 Ch/B-Colin Roberts Pr-J. Y. Huws-Davies Exec/Vp-Byron S. Hollinshead VP-Harold R. Dejaeger Sec-Alfred J. Baldwin PRIVATE LABEL COSMETICS

INC 20-10 Maple Ave Fair Lawn, N.J. 07410 Phone: 423-1515 100,000 Sq. Ft. Emp: 227 Office: M 3, F 7 Plant: M 30, F 187 Cosmetics

RELAY SPECIALTIES INC. 1300 Plaza Road Fair Lawn, N.J. 07410 Phone: 797-3313 6,000 Sq. Ft., 2 Acres Emp: 27 Office: M 1, F 13

Plant: M 3, F 10 ★Timers, relays, counters, photo-electric controls, temperature controls ▲SIC 3679

Pr—J. George Sauer G/M—B. Albanese S/M—S. Gershberg P/A—F. Stave

RENCO FINISHING CORP. 20-21 Wagaraw Rd. Fair Lawn, N.J. 07410 Phone: 796-5300 Emp: 23 Office: M 2, F 1 Plant: M 20 Dyeing and finishing of piece goods SIC 2261 Pr-David Renco VP-J. Zavaglia

SANDOZ COLOR & CHEMICAL Div. Of: Sandoz-Wander Inc. P.O. Box 357 Fair Lawn, N.J. 07410 Phone: 796-2800 Emp: 250 Specialty Chemicals for Textile, Paper, Leather & Plastics SIC 2815 VP-Dr. H. Vollenweiker P/M-Dr. H. R. Bolliger

SANDVIK STEEL, INC. 1702 Navins Rd. Fair Lawn, N.J. 07410 Phone: 797-6200 Emp: 354 Office: M 109 F 45 Plant: M 185, F 15 Strip Steel, Stainless Tube & Pipe, Stainless Wire, Carbide Cutting Tools, Carbide Wear Parts, Die Steel SIC 3423 Pr-Peter Wicknertz

VP-Borje Fernaeus VP-Anders Lofberg VP—Robert Jensen Tr—Richard Lofberg Comp—Lewis Willick A/M—Joseph P. Strenk P/A—Robert G. Reveri T/M—Robert C. Tuttle Pers/M—Michael Stimola

SEALED AIR CORPORATION 19-01 State Highway 208 Fair Lawn, N.J. 07410 Phone: 791-7600 49,000 Sq. Ft., 5.4 Acres Emp: 85 Office: M 18, F 8 Plant: M 59 ★Air cellular cushioning, protective packaging SIC 3079

Pr-T. J. Dermot Dunphy Exec/Vp—Alfred W. Fielding VP—William G. Danforth VP-Donald R. Mcgregor Sec-Lorne R. Barclay A/M-Paul B. Hogan

▲ Exporters

Importers

Exporters & Importers

Beearch Facilities

COMMUNITY RIGHT TO KNOW SURVEY FOR 2002

For State and Federal Community Right to Know Reporting

| Please | type | this | form. |
|--------|------|------|-------|
|--------|------|------|-------|

THIS PAGE MUST BE COMPLETED, SIGNED, AND RETURNED.

| 1 7 2 7 2 1 0 0 0 0 0 3545 333515 ATTN: ANDERS HILLMAN SANDVIK INC 1702 NEVINS ROAD FAIRLAWN, NJ 07410-0428 | MUST BE PROVIDED 2 2 1 7 1 7 7 3 7 0 2 1 7 1702 NEVINS RD FAIR LAWN, NJ 07410-0428 County: BERGEN | | | |
|--|---|--|--|--|
| See instructions if information on these forms is incorrect. | Please indicate the reason for changing this information [] this facility moved [] additional facility [] correction to existing location | | | |
| B Does this facility Produce, Store or Use Environmental Hazardous Substances on | D Number of employees at facility 250 | | | |
| Table A in a pure or mixture state: Darken either yes or no box 1. in any quantity? Yes No | E Number of facilities in New Jersey 1 | | | |
| 2. above thresholds? Yes No | F Federal EIN 221717737 Please verify | | | |
| C Briefly describe the current operations or business conducted at this facility: | G If you are claiming an R&D lab exemption for this facility, enter your approval number. | | | |
| H Check box if you have reported any substances pursuant to Section 312 of the Federal Emergency Planning and Community Right to Know Act (EPCRA/SARA, Title III) | | | | |
| I FACILITY EMERGENCY CONTACT | | | | |
| Facility Dhana Number (2041) 704 5000 | tle MAINTENANCE SUPRV mergency Contact Phone Number (201) 794-5104 | | | |
| NOTE: Check box only if the facility information in boxes A, D, E, I or J has changed since your last submittal. | | | | |
| J CERTIFICATION OF OWNER/OPERATOR OR AUTHORIZED REPRESENTATIVE I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. | | | | |
| Signature MMM M | Fax # (201) 794-5049 Date $2/21/03$ Phone # (201) 794-5313 | | | |
| A-ADORC III A | itle PLANT MAR. | | | |
| RETURNED SIGNED ORIGINAL TO: You are required to send copies of this survey to the agencies | | | | |

RETURNED <u>SIGNED</u> ORIGINAL TO: NJDEP Community Right To Know Survey PO Box 405

Trenton, NJ 08625-0405

You are required to send copies of this survey to the agencies listed on Page 23 of the instruction guide. You must also keep a copy at your facility.

17272100000

SANDVIK INC 1702 NEVINS RD FAIR LAWN, NJ 07410-0428

PART 2 2002 CHEMICAL INVENTORY REPORT

Reporting Period: January 1 - December 31, 2002

Please type all responses.

Photocopy this page if you need additional forms.

Read instructions carefully before completing this form.

| | Read instructions carefully before completing this form. | | |
|--|--|---|--|
| SUBSTANCE DESCRIPTION | HAZARDS (Check all that apply) | INVENTORY INFORMATION | |
| Name: Phos phoric acid Substance Number: 2674 CAS Number: 3254-63-5 DOT Number: 3018 Check one Pure Mixture Check one Solid Liquid Ga Trade Secret: (Check if claiming) | ☐ Sudden release of pressure ☐ Reactive ☐ Acute health effects ☐ Chronic health effects | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature SE | |
| Name: Solforic acid Substance Number: 1759 CAS Number: 7664-93-9 DOT Number: 1830 Check one Pure Mixture Check one Solid Liquid Ga Trade Secret: (Check if claiming) | Fire Sudden release of pressure Reactive Acute health effects Chronic health effects None per MSDS Location(s) Location(s) | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature Storage temperature | |
| Name: Heating Oil Substance Number: 2444 CAS Number: 68476-34-6 DOT Number: 1993 Check one Pure Mixture Check one Solid Liquid Ga Trade Secret: (Check if claiming) | Fire Sudden release of pressure Reactive Acute health effects Chronic health effects None per MSDS Location(s) Front of count | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature O4 | |
| Name: FThano Substance Number: 2394 CAS Number: 10140-87-1 DOT Number: 1493 Check one Pure Mixture Check one Solid Liquid Ga Trade Secret: (Check if claiming) | Fire Sudden release of pressure Reactive Acute health effects Chronic health effects None per MSDS Location(s) 66~Warehous | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature | |
| Name: Cobalt Substance Number: 0523 CAS Number: 7440 - 48 - 4 DOT Number: Check one Pure Mixture Check one Solid Liquid Ga Trade Secret: (Check if claiming) | Fire Sudden release of pressure Reactive Acute health effects Chronic health effects None per MSDS Location(s) | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature | |
| CONTAINER CODES AND DESCRIPTIONS TA Above ground tank TB Below ground tank TI Tank inside building DS Steel drum DP Plastic drum DF Fiber drum CN Can CN Can TW Tank Wagon CB Carboy SI Silo CO Other (describe) | 20 Greater than 10 million pounds Pressure 19 1,000,001 to 10 million pounds 01 Ambier 18 500,001 to 1 million pounds 02 Greate 17 250,001 to 500,000 pounds 03 Less th 16 100,001 to 250,000 pounds Temperature 15 50,001 to 100,000 pounds 04 Ambiel 14 10,001 to 10,000 pounds 05 Greate 13 1,001 to 10,000 pounds 05 Greate 12 101 to 1,000 pounds 06 Less the cryoge 11 11 to 10 pounds 07 Cryoge | r than ambient pressure an ambient pressure t temperature r than ambient temperature an ambient temperature but not nic (freezing conditions) inic conditions (less than -200 C) eans "normal," "surrounding," or "room" | |

17272100000

SANDVIK INC 1702 NEVINS RD FAIR LAWN, NJ 07410-0428

PART 2 2002 CHEMICAL INVENTORY REPORT

Reporting Period: January 1 - December 31, 2002

Please type all responses.
Photocopy this page if you need additional forms.
Read instructions carefully before completing this form

| <u></u> | Read instructions carefully before completing this form. | | |
|---|---|---|--|
| SUBSTANCE DESCRIPTION | HAZARDS (Check all that apply |) INVENTORY INFORMATION | |
| Name: Hydrogen Chloride Substance Number: 2909 CAS Number: 7647-01-0 DOT Number: 1050 Check one Pure Mixture Check one Solid Liquid AGa Trade Secret: (Check if claiming) | Sudden release of pressure Reactive Acute health effects Chronic health effects | Avg. daily inventory 72 Days on site 365 Storage pressure 02 Storage temperature 04 | |
| Name: Hydrogen Substance Number: 1010 CAS Number: 1333-74-0 DOT Number: 1049 Check one Pure Mixture Check one Solid Liquid AGa Trade Secret: (Check if claiming) | Fire Sudden release of pressure Reactive Acute health effects Chronic health effects None per MSDS, Location(s) South-East | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature Corner of property | |
| Name: Mcthane Substance Number: 1202 CAS Number: 74-82 8 DOT Number: 1971 Check one Pure Mixture Check one Solid Liquid Ga Trade Secret: (Check if claiming) | Fire Sudden release of pressure Reactive Acute health effects Chronic health effects None per MSDS Location(s) Sudden release of pressure | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature YUD | |
| Name: Transium Aetrachloride Substance Number: | Sudden release of pressure Reactive Acute health effects Chronic health effects None per MSDS | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature GY GC CY 13 365 01 Storage temperature | |
| Name: Substance Number: CAS Number: DOT Number: Check one Pure Mixture Check one Solid Liquid Ga. Trade Secret: (Check if claiming) | Fire Sudden release of pressure Reactive Acute health effects Chronic health effects None per MSDS Location(s) | Container Type Max. daily inventory Avg. daily inventory Days on site Storage pressure Storage temperature | |
| TA Above ground tank BA Bag TB Below ground tank BX Box TI Tank inside building CY Cylinder DS Steel drum BG Bottles or jugs (glass) DP Plastic drum BP Bottles or jugs (plastic) DF Fiber drum BN Tote bin CN Can TW Tank Wagon CB Carboy RC Railcar SI Silo OT Other (describe) | 20 Greater than 10 million pounds 19 1,000,001 to 10 million pounds 18 500,001 to 1 million pounds 17 250,001 to 500,000 pounds 18 500,001 to 500,000 pounds 19 100,001 to 250,000 pounds 19 50,001 to 100,000 pounds 10 10,001 to 50,000 pounds 10 10 10 10,000 pounds 10 10 10 10,000 pounds 10 10 10 10,000 pounds 11 10 10 10,000 pounds 12 101 to 1,000 pounds 13 1,001 to 10,000 pounds 14 100 pounds 15 Greater than 10 million pounds 16 Greater than 10 million pounds 17 Emperature than 10 million pounds 18 500,001 to 10,000 pounds 19 6 Greater than 10 million pounds 10 1 to 10 pounds 10 7 Cryot | ent temperature ter than ambient temperature than ambient temperature but not jenic (freezing conditions) genic conditions (fess than -200 C) means "normal," "surrounding," or "room" | |

Laco přířa čeraj

THE OF THE MADNIMENTAL PROTECTION DIVISION OF WATER RESOURCES CN 625

TRENTON, NEW JERSEY GE625

IN THE MATTER OF

SANDVIK, INCORPORATED

ADMINISTRATIVE

CONSENT

ORDER

The following FINDINGS are made and ORDER is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (NJDEP) by N.J.S.A. 13:1D-1 et seq. and the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seg., and duly delegated to the Assistant Director of Enforcement of the Division of Water Resources pursuant to N.J.S.A. 13:18-4.

FINDINGS

In 1978, the Borough of Fair Lawn discovered that two private non-potable wells located in the Fair Lawn Industrial Park contained high concentrations of volatile organic chemicals, including chloroform, 1,1,1-trichloroethane, carbon tetrachloride, and 16 other volatile organics. Subsequent sampling by the Borough of Fair Lawn revealed the presence of volatile organic chemicals in the Borough's Westmoreland potable wellfield at: Well No. 10, located at the southwest corner of 11th Street and Henderson Boulevard; Well No. 11 located at the northeast corner of Chester Street and Ontario Avenue; and Well No. 14, located at the southeast corner of Oak Street and Westmoreland Avenue. Two additional Borough potable wells near the Westmoreland wellfield were also found to contain volatile organic chemicals; Well Nos. 23 and 24 located off Pollitt Drive in the Fair Lawn Industrial Park. As a result of these findings these five wells were removed from service by the Borough.

400

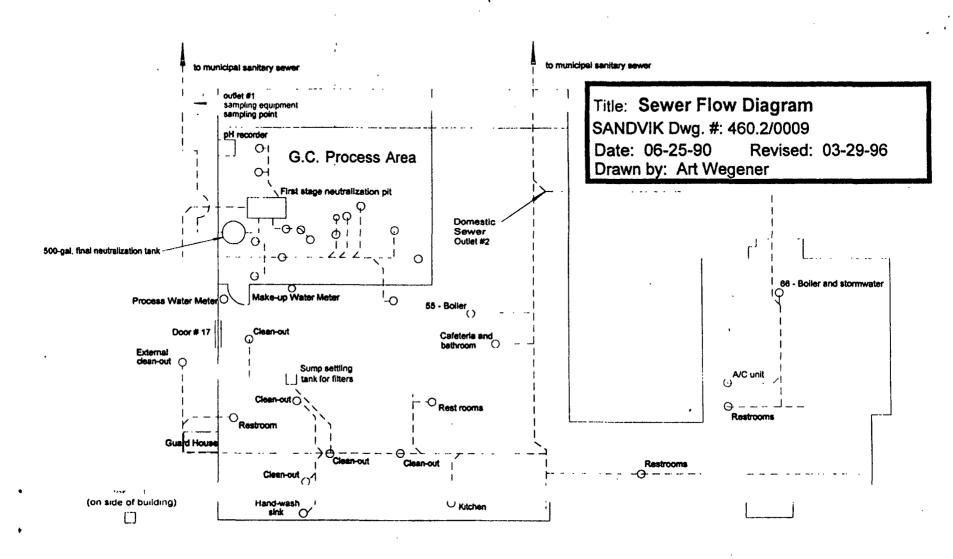
- 2. NIDEP's Division of Water Resources (DWR) conducted an industrial survey in the Borough of Fair Lawn in an effort to identify industries using volatile organic chemicals, the handling, storage or disposal of which may have contributed to the presence of volatile organic chemicals in the wells identified in paragraph 1. As a result of this survey, Sandvik Incorporated (hereinafter Sandvik), located at 1702 Nevins Road, Block 4902, Lot 2, in the Borough of Fair Lawn (hereinafter the site) was identified as one of these industries.
- 3. At the site, Sandvik manufactures various types and sizes of cutting tools. Various volatile organic chemicals have been and are utilized in the manufacturing process. The site contains a waste burial area referred to as Pit No. 1, solvent transfer areas, a subsurface waste oil tank and drum storage areas.
- 4. DWR conducted a comprehensive investigation of the site in conjunction with Sandvik. This investigation included the installation and sampling of ground water monitor wells, analysis of ground water from the wells, sampling and analysis of water from Sandvik's footing drain sump pit, collection and analysis of soil samples from borings, conduction of a metal detection survey, and conduction of an excavation survey and collection and analysis of samples from adjacent off-site wells. Based upon the findings of said investigation and other factors DWR concluded that the site is one of the sources of the violatile organic chemicals in the Borough's wells identified in paragraph 1.
- 5. Sandvik expressed a desire to cooperate with NJDEP to settle this matter. Therefore, based on the information available to the parties on the effective date of this ADMINISTRATIVE CONSENT ORDER and without trial or adjudication of any issues of fact or law and without Sandvik's admission of liability or responsibility, NJDEP and Sandvik have agreed to execute this ADMINISTRATIVE CONSENT ORDER.

ORDER

NOW THEREFORE, IT IS HEREBY ORDERED AND AGREED THAT:

6. Sandvik shall:

(a) Collect a total of three (3) discreet soil samples consisting of one (1) each at depths of 0.5 feet, 3 feet and 6 feet below the ground surface from the area within the fence close to Pit No. 2 marked Area 'A' on Attachment A within sixty (60) days of the effective date of this ADMINISTRATIVE CONSENT GROER.



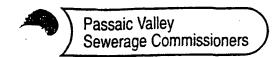
Outlet Designation #:

Outlet # 1: 08401681-18055-001

n:\com\floweo\pvec\sewer-3.dw2

John 9 121/96

DANIEL F. BÉCHT, ESC.
CHAIRMEN
DOMING W. CUCCINELLO
ROMALE W. GIACONIA
JAMES KRONE
RAYMOND LUCHKO
KEVIN ROBERTSON
DONALD TUCKER
COMMISSIONERS



600 WILSON AVENUE NEWARK, N.J. 07105 (201) 344-1800 Fax: (201) 344-2951 ROBERT J. DAVENPORT EXECUTIVE DIRECTOR PETER G. SHERIDAN CHIEF COUNSEL LOUIS LANZILLO CLERK

April 30, 1997

Mr. J.T. Tahvanainen Sandvik Coromat Company 1702 Nevins Road Fairlawn, New Jersey 07410

RE: PROCESS DISCHARGE REQUEST

Dear Mr. Tahvanainen:

This is in response to your letter dated 3/20/97, wherein you informed PVSC of your company's intention to use a new raw material, acetonitrile (methyl cyanide), in your existing process. You claimed that this material would be consumed in the process (coatings manufacture), which would minimize the possibility of cyanide being discharged to the sewer. However, in order to be certain that this is the case, you stated that Sandvik would add a sodium hypochlorite pretreatment step to destroy any free cyanide. Finally, you attached a study by your consultant, showing that no free cyanide was detected in samples taken during trial process runs utilizing acetonitrile.

In view of your plans to pretreat the process wastewater for the destruction of cyanide, PVSC has no objection to the use of acetonitrile as a raw material in your existing coating manufacturing operation. However, to be certain that your cyanide destruct system is working properly, PVSC is forthwith requiring you to sample your process wastewater for total cyanide, both before treatment, and immediately downstream of the cyanide destruct system. This must be done two times per month from this point forward, starting in May, 1997. Your Sewer Connection Permit will be revised accordingly. PVSC will also take samples on a random basis. If the results reveal that your cyanide destruct system is ineffective, you will be required to correct any pretreatment deficiencies, and PVSC will begin the process of determining a site specific local limit for total cyanide.

RE: PROCESS DISCHARGE REQUEST - SANDVIK

Page 2

You should submit the results of your sampling on a monthly MR-1 report (blank copy attached). Additionally, should you discontinue the use of this raw material for any appreciable length of time, you must also notify PVSC. If you have any questions, please call Andy Caltagirone at (201) 817-5723.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Frank P. D'Ascensio

Manager of Industrial & Pollution Control

FPD/mc

cc: Robert J. Davenport, Executive Director

Tom Mack

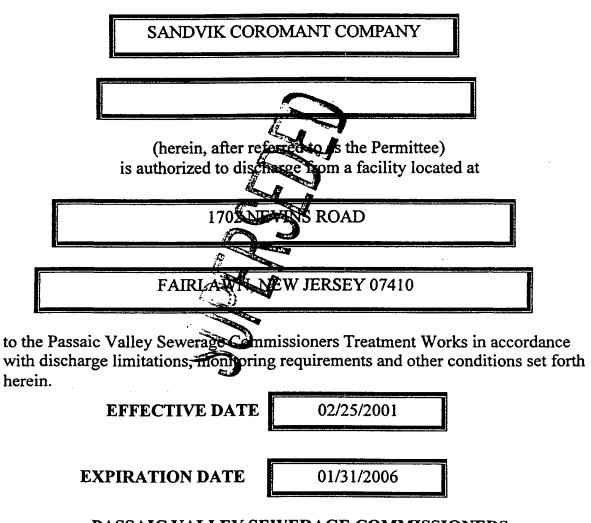
Andy Caltagirone

PASSAIC VALLEY SEWERAGE COMMISSIONERS

SEWER USE PERMIT

| | | = |
|---------|----------|----|
| Permit# | 08220005 | J |
| | | -1 |

(Please use the Permit Number on any correspondence with PVSC) In compliance with the provisions of the Federal Water Pollution Control Act, its amendments, the Clean Water Act and Rules and Regulations of the Passaic Valley Sewerage Commissioners.



PASSAIC VALLEY SEWERAGE COMMISSIONERS

Robert J. Davenport Executive Director

SECTION A

CONDITION SPECIFIC TO THIS PERMIT

1. Sampling

- 1.1 Samples and measurements taken as required under this permit shall be representative of the monitored activity. All samples shall be taken at the monitoring points approved by the PVSC and specified in this permit. Unless other wise specified, all samples shall be drawn by a 24-hour composite sampler acceptable to the PVSC which shall be equipped with attachments appropriate for affixing seals. During and after collection, the sample shall be maintained between 1°C 4°C.
- 1.2 In addition to the other sample requirements set forth in SECTION A, PART 2 of this permit, the Permittee shall comply with the following:
 - (a) For User Charge, the Permittee shall install a 24 hour composite sampler on Outlet (s) # 1 which shall be maintained in proper working order at all times.
 - (b) Samples that are taken for heavy metal analysis must be drawn by an automatic 24-hour composite sampler. A grab sample is not acceptable for metals compliance determination.

(a) Beginning (02/25/2001) and lasting through (01/31/2006) the Permittee is authorized to discharge from outlet # (08220005-1). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C). (8 inch discharge line-G.C. area). The sample point is located on the outside in the discharge line at the southeast corner of the G.C. Process Building. The Permittee shall submit volume and analysis results in accordance with PVSC User Charge Self Monitoring Report Form MR-2.

| EFFLUENT CHARACTERISTIC | Γ | DISCHARGE LIMITATIONS | | | ORING EMENTS |
|----------------------------|-------|-----------------------|--------------------------|----------------|------------------|
| PARAMETER | | DAILY MAX | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| BOD (0310) | xxxxx | xxxxx | Monthly | 24 hr. comp. | Monthly. |
| TSS (0530) | xxxxx | xxxxx | Monthly | 24 hr. comp. | Monthly |
| pH (9000) | xxxxx | 5 to 10.5 | Continuous | Recorder | * |
| Volume | XXXXX | xxxxx | Recorder | XXXXX | Monthly |

^{*} Permittee to store pH Recorder Charts and have available for review by PVSC personnel on demand.

(a) Beginning (02/25/2001) and lasting through (01/31/2006) the Permittee is authorized to discharge from outlet # (08220005-2). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. The volume shall be determined from the readings on the city meter (A) less the readings of the process meter (B) on Outlet #1. (10 inch discharge line – shipping area). The Permittee shall submit volume and analysis results in accordance with PVSC User Charge Self Monitoring Report Form MR-2.

| EFFLUENT CHARACTERISTIC | DISCHARGE LIMITATIONS | | | MONITO REQUIRE | |
|----------------------------|-----------------------|-------|--------------------------|-------------------|---------------------|
| PARAMETER | | | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| BOD (0310) | XXXXX | XXXXX | N/A * | N/A | XXXXX |
| TSS (0530) | xxxxx | XXXXX | N/A * | N/A | xxxxx |
| Volume | XXXXX | XXXXX | XXXXX | XXXXX | Monthly |

^{*} Concentrations for User Charge to be determined from Residential Strength Standards.

(b) Beginning (02/25/2001) and lasting through (01/31/2006) the Permittee is authorized to discharge from outlet # (08220005-1). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. (Before Treatment). The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C). (8 inch discharge line – G.C. area). The sample point is located before the connection to the cyanide destruct system. The Permittee shall submit volume and analysis results in accordance with PVSC Pretreatment Discharge Monitoring Report Form MR-1.

| | DISCHARGE LIMITATIONS | | | MONITORING REQUIREMENTS | |
|-----------|-----------------------|-------|--------------------------|----------------------------|---------------------|
| PARAMETER | | | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| CN (T) | xxxxx | XXXXX | Quarterly | Grab | Monthly |
| Volume | xxxxx | xxxxx | XXXXX | XXXXX | Monthly |

(b) Beginning (02/25/2001) and lasting through (01/31/2006) the Permittee is authorized to discharge from outlet # (08220005-1). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. (After Treatment). The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C). (8 inch discharge line – G.C. area). The sample point is located downstream of the cyanide destruct system. The Permittee shall submit volume and analysis results in accordance with PVSC Pretreatment Discharge Monitoring Report Form MR-1.

| | DISCHARGE | LIMITATIONS | MONITO REQUIRE | | |
|-----------|-----------|-------------|--------------------------|----------------|---------------------|
| PARAMETER | | | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| CN (T) | xxxxx | xxxxx | Quarterly | Grab | Monthly |
| Volume | XXXXX | XXXXX | XXXXX | XXXXX | Monthly |

(b) Beginning (02/25/2001) and lasting through (01/31/2006) the Permittee is authorized to discharge from outlet # (08220005-1). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C). (8 inch discharge line G.C. area). The sample point is located on the outside in the discharge line at the southeast corner of the G.C. Process Building. The Permittee shall submit volume and analysis results in accordance with PVSC Pretreatment Discharge Monitoring Report Form MR-1.

| PVSC LOCAL LIMITS | DISCHARGE LIMITATIONS | | MONITORING REQUIREMENTS | | |
|----------------------|----------------------------|----------------------------|--------------------------|----------------|---------------------|
| PARAMETER | mg/l MONTHLY AVERAGE | mg/l THRESHOLD VALUE | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| Cd | 0.19 | 0.005 | Monthly | 24 hr. comp. | Monthly |
| Cu | 3.02 | 0.092 | Monthly | 24 hr. comp. | Monthly |
| Pb | 0.54 | 0.029 | Monthly | 24 hr. comp. | Monthly |
| Hg | 0.080 | 0.001 | Monthly | 24 hr. comp. | Monthly |
| Mo | XXXXX | XXXXX | Monthly | 24 hr. comp. | Monthly |
| Ni | 5.9 | 0.02 | Monthly | 24 hr. comp. | Monthly |
| Zn | 1.67 | 1.67 | Monthly | 24 hr. comp. | Monthly |
| Volume | XXXXX | XXXXX | xxxxx | xxxxx | Monthly |

3. SCHEDULE OF COMPLIANCE

The Permittee is required to meet the following schedule of compliance:

- A. Analysis of wastewater parameters shall be performed by a laboratory that has been certified by the State of New Jersey. Permittee is required to submit all certified analyses as an attachment to the monthly MR-1 and/or MR-2 report.
- B. The Permittee is required to submit as an attachment to the MR-1 and/or MR-2 report monthly, a water balance showing meter readings used to calculate the reported volume discharged.
- C. Permittee to submit a periodic compliance monitoring report MR-2 form for monthly reporting requirements within twenty-one (21) days after the end date of each preceding month.
- D. Permittee to be in compliance with Passaic Valley Sewerage Commissioners Local Limits.
 - Permittee to submit a periodic compliance monitoring report MR-1 form for monthly reporting requirements within thirty-five (35) days after the end date of each preceding month in accordance with General Pretreatment Regulations 40 CFR 403.12 section (e).
- E. If the Permittee has been authorized by the PVSC to certify for non-use for one or more heavy metals, the Permittee must sample the discharge in March and September of each year in order to prove continued compliance. If any analytical results exceeds the Threshold Value, but not the Local Limit, the Permittee shall analyze a sample each succeeding month until three successive monthly results are at or below the Threshold Value stated in the PVSC Rules and Regulations Section B-103.3 Table B-2.
- F. When final pretreatment standards are promulgated Permittee shall submit a baseline monitoring report to PVSC in accordance with 40 CFR 403.12 and any subsequent revisions (copy attached).
- G. The Permittee shall notify in writing, all agencies as directed by 40 CFR 403.12 (p) of any discharges classified hazardous waste under 40 CFR 261.

SECTION B

CONDITIONS APPLICABLE TO ALL PERMITS

1. GENERAL

- 1.1 The Permittee shall comply with all conditions set forth in this permit and all applicable requirements which are set forth in N.J.S.A. 58:14-1 et seq. and the Rules and Regulations of the PVSC, as well as the Federal Clean Water Act, 33 <u>U.S.C.A.</u> § 1251 et seq. and the New Jersey Water Pollution Control Act, <u>N.J.S.A.</u> 58:10A-1 et seq. Failure to comply with all the terms and conditions of this permit shall constitute a violation of the Rules and Regulations of the PVSC.
- 1.2 All discharges shall be consistent at all times with the terms and conditions of this permit and no regulated pollutant shall be discharged more frequently than authorized or at a level in excess of that which is authorized by this permit.
- 1.3 The Permittee shall not discharge or deposit or cause or allow to be discharged or deposited into the Treatment Works or public sewer, any waste which causes or contains the following
 - (a) Explosive Wastes Wastes in such quantity which may create a fire or explosion hazard to the Treatment Works, collection system or to the operation of the system, including but not limited to, wastewater with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 C.F.R. § 261.21.
 - (b) <u>Corrosive Wastes</u> Wastes in such quantity which will cause corrosion or deterioration of the Treatment Works. Unless a higher limit is otherwise stated in this Sewer Use Permit, all wastes shall have a pH not less than 5.0. Unless otherwise stated in the Sewer Use Permit, all wastes shall have a pH not more than 10.5. Prohibited materials include, but are not limited to, acids, sulfides, concentrated chloride or fluoride compounds.

- (c) <u>Solids or Viscous Wastes</u> Solids or viscous wastes in amounts which would cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the Treatment Works. Prohibited materials include, but are not limited to, uncomminuted garbage, bones, hides, or fleshings, cinders, sand, stone or marble dust, and glass.
- (d) Oil And Grease (1) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through, (2) any industrial wastes containing floatable fats, wax, grease or oils, (3) any industrial wastes containing more than 100 mg/l of petroleum based oil or grease.
- (e) Noxious Materials (1) Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in quantity that may cause worker health and safety problems, (2) noxious liquids, or gases, which in sufficient quantity either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or are or may be sufficient to prevent entry into a sewer for its maintenance and repair.
- (f) Radioactive Wastes Radioactive wastes or isotopes of such half life or concentration that they do not comply with regulations or orders issued by the appropriate authority having control over their use and which will, or may, cause damage or hazards to the Treatment Works or personnel operating the system.
- (g) <u>Interference</u> Any waste, including oxygen demanding wastes (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will interfere with the PVSC Treatment Works.
- (h) <u>Excessive Discharge Rate</u> Industrial wastes discharged in a slug or such volume or strength so as to cause a treatment process upset and subsequent loss of treatment efficiency.

- (i) Heat (1) Any discharge in excess of 150°F (65°C), (2) Heat in amounts which would inhibit biological activity in the PVSC Treatment Works resulting in a treatment process upset and subsequent loss of treatment efficiency.
- (j) <u>Unpolluted Waters</u> Any unpolluted water including, but not limited to, cooling water and uncontaminated storm water, which will increase the hydraulic load on the Treatment System, except as approved by PVSC.
- (k) <u>Dilution Waters</u> Any water added for the purpose of diluting wastes, which would otherwise exceed applicable maximum concentration limits.
- (l) <u>Violations</u> Wastes, which cause the PVSC treatment plant to violate its NJPDES Permit, applicable, receiving water standards, permit regulating sludge which is produced during treatment or any other permit issued to PVSC.
- (m) <u>Ultra Hazardous Toxics</u> Those wastes designated by EPA as sufficiently toxic that they shall not be discharged to the sanitary sewer in any concentrations.
- (n) <u>Trucked Pollutants</u> Any trucked or hauled pollutants, except at discharge points designated by the Chief Executive Officer, and only after approval is issued by the PVSC.
- (o) <u>Groundwater</u> Any groundwater, pump test water, well development water or remediation water whether contaminated or uncontaminated, unless specifically authorized by the PVSC in this permit or other documents.
- (p) <u>Stormwater</u>- Any stormwater, whether contaminated or uncontaminated, unless specifically authorized by the PVSC in this permit.
- (q) <u>Bypassed Wastes</u> Any wastewaters which would normally be monitored or pretreated, but are discharged to the sanitary sewer without being monitored or pretreated, unless specifically authorized by PVSC.

- 1.4 The Permittee shall not discharge or convey or permit to be discharged or conveyed to the PVSC Treatment Works any wastes containing pollutants of such character or quantity that.
- (a) Impairs the PVSC's ability to protect the health and safety of the treatment plant workers.
- (b) Will not be susceptible to treatment or will interfere with the process or efficiency of the Treatment Works.
- (c) Violate any federal categorical pretreatment standard. As pretreatment standards for toxic or other hazardous pollutants are promulgated by USEPA for a given industrial category, all industrial users within that category shall conform to the USEPA timetable as well as any numeric limitations imposed by the USEPA.
- (d) Violate a local limit imposed or adopted by the PVSC.
- (e) Violate a Best Professional Judgment limit imposed or adopted by the PVSC.
- (f) Cause the PVSC treatment plant to violate its NJPDES Permit, applicable receiving water standards, regulations and/or any permits governing sludge which is produced during treatment process, or any other permit issued to the PVSC.
- 1.5 The Permittee shall at all times maintain in good working order and operate all pretreatment control and monitoring equipment in strict accordance with all design specifications and manufacturer recommendations. Proper operation and maintenance includes, at a minimum, effective performance based upon specifications designed to meet applicable effluent limits, adequate funding, adequate operator staffing and training and adequate laboratory and process controls.

1.6. The Permittee shall dispose of all solids, sludges, filter backwash or other pollutants or hazardous waste removed in the course of pretreatment or control of wastewaters and/or the treatment of the intake waters, in accordance with applicable Federal, State and local laws and regulations. Records documenting such disposal shall be made available to the PVSC for review upon request.

2. INDUSTRIAL WASTE REPORTING

- 2.1 <u>USER CHARGE:</u> User Charge monitoring results obtained during the previous month shall be reported monthly on a Discharge Monitoring Report Form (MR-2). The due date for properly signed reports shall be 21 days after the reporting period ends. If the 21st day falls on a Saturday, Sunday or PVSC Holiday, then the report shall be due on the next PVSC work day. If the Permittee fails to submit the MR-2 Report on a timely basis the Executive Director shall estimate the usage for the period. The estimate may be made thirty (30) days after the due date of the report.
- 2.2 PRETREATMENT: Pretreatment monitoring results obtained during the previous month shall be reported monthly on a Discharge Monitoring Report Form (MR-1). The due date for properly signed reports, shall be 35 days after the reporting period ends. If the 35th day falls on a Saturday, Sunday or PVSC Holiday, then the report shall be due on the next PVSC work day.
- 2.3 <u>DUE DATE:</u> MR-1 and MR-2 Reports must be physically delivered to the PVSC Administration office or Security office by Midnight of the date by which they are due. The use of certified mail or other means to document or guarantee delivery may be used if deemed necessary. Postmarks are not valid to demonstrate compliance with the due date requirement.

2.4 MAILING ADDRESS: Reports required herein must be addressed to:

PASSAIC VALLEY SEWERAGE COMMISSIONERS ATTN: INDUSTRIAL DEPARTMENT 600 WILSON AVENUE NEWARK, NEW JERSEY 07105

- 2.5 **FACSIMILE:** The Permittee may meet the requirement for submission by sending the report(s) via facsimile provided the report is received at the PVSC Administration Office between the hours of 8:30 a.m. and 4:00 p.m. on any date up to and including the due date. In addition the due date for a hard copy of the same report shall be four (4) days after the transmission of the facsimile. Failure to deliver the hard copy by the due date specified shall result in the report being considered as not having been received and shall constitute a violation of the permit.
- 2.6 <u>ANALYTICAL PROCEDURES</u>: Analytical results for BOD, TSS or any other parameter as required by this permit shall be reported on the date that the sample was removed from the sampling device for analysis. The following procedure shall be used when reporting analytical results:
 - (a) the pollutant limit will define the precision, or number of digits to the right or left of the decimal point, to be reported.
 - (b) Calculated results shall be rounded off to the same precision as defined for that pollutant in the limit.
 - (c) Zeros in the pollutant limit are included in order to determine the precision.
 - (d) The following procedure shall be followed when rounding off results:
 - (i) round off by dropping digits that are irrelevant. If the digit 6,7,8 or 9 is to be dropped, increase the preceding digit by one unit.
 - (ii) If the digit 0,1,2,3 or 4 is to be dropped, do not alter the preceding digit.
 - (iii) If the digit 5 is to be dropped, round off the preceding digit to the nearest even number (2.25 becomes 2.2 while 2.35 becomes 2.4).

- 2.7 **RECORDING OF RESULTS:** For each measurement of a sample taken pursuant to the requirements of this permit, the Permittee shall maintain a record of the following information:
 - (a) The date, exact places and time of sampling;
 - (b) The dates the analysis were performed;
 - (c) The person(s) who performed the analysis;
 - (d) The analytical techniques or methods used; and
 - (e) The results of all required analyses.
- 2.8 **RECORDS RETENTION:** The Permittee shall maintain such records as necessary to demonstrate compliance with the requirements of this permit, the PVSC Rules and Regulations and any applicable State or Federal Pretreatment standard or requirement. All records and information resulting from the monitoring activities required by this permit including, all records of analysis performed, calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of five years.

3. INDUSTRIAL WASTE MONITORING

- 3.1 MONITORING EQUIPMENT: The Permittee shall install, at his own cost and expense, whatever monitoring equipment is required by the conditions of this permit to facilitate the accurate observation, sampling and measurement of the discharge. Such equipment shall be kept safe, secured from unauthorized entry or tampering and accessible at all times. Monitoring equipment shall be calibrated as recommended by the manufacturer, except that LEL recorder shall be calibrated daily and pH recorders shall be calibrated at least weekly, which ever is more frequent.
- 3.2 Permittee shall safeguard any PVSC monitoring equipment that is installed at their facility. Permittee shall reimburse PVSC for any equipment that is either damaged or stolen from its point of installation. Reimbursement costs will be determined by PSVC.

- 3.3 The volume of each sample shall be proportional to the discharge flow rates unless specifically modified by PVSC. For a 24 hour continuous discharge, a minimum of 24 individual samples shall be collected at equal intervals and at least once per hour. For a continuous discharge of less than 12 hours, individual samples shall be taken at least once every 30 minutes. For discharges which are not continuous, individual samples shall be taken such that they will be representative of the plant waste water discharge.
- 3.4 Permittee shall notify the PVSC as soon as possible, but in no case later than 2 hours from becoming aware of the same, if a sampling, monitoring, recording or other device required in accordance with this permit becomes inoperable. Unless otherwise directed by the PVSC, the Permittee shall submit a written report to the PVSC, attention Industrial and Pollution Control Department, within 5 working days of the occurrence detailing what occurred, why it happened, what will be done to correct the problem and a date when the problem will be corrected. If the PVSC approves the corrective action and it is expected to take more than two months from the date of occurrence to complete, the Permittee shall submit monthly progress reports until such time as the problem is corrected.
- 3.5 NOTIFICATION OF NON-COMPLIANCE: If, for any reason, the Permittee does not comply with or will be unable to comply with any effluent limitation specified in this permit, or discharges any waste and meets the Slug Discharge Definition as defined in Appendix A of the PVSC Rules and Regulations, the Permittee shall notify the PVSC within 24 hours of such occurrence.
- 3.6 If this report is made orally, a written report containing the following information, shall be submitted within five (5) working days:
 - (a) A description of the discharge and the cause of the period of noncompliance;
 - (b) The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and
 - (c) The steps being taken to reduce, eliminate and prevent a recurrence of the non-complying discharge.

- 3.7 The Permittee shall take all reasonable steps to minimize any adverse impact to the PVSC Treatment Works resulting from noncompliance with any pretreatment limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge. This condition in no way affects PVSC's right to suspend a permit in order to stop a discharge which presents an imminent or substantial hazard to the public health, safety or welfare to the local environment or which interferes with the operation of the PVSC Treatment Works.
- 3.8 **TEST PROCEDURES:** Samples and measurements taken as required in this permit shall be representative of the volume and nature of the monitored discharge.
- 3.9 The Permittee shall perform all analyses in accordance with the test procedures identified under 40 C.F.R. Part 136. All test procedures, other than those identified in 40 C.F.R. Part 136, shall be considered as alternative test procedures. The Permittee is authorized to utilize an alternative test procedure only if prior written approval is received from the Chief Executive Officer in accordance with Section 319.2 of the Rules and Regulations of the PVSC.
- 3.10 Sample analyses of pollutants required by this permit shall be performed by a laboratory with a New Jersey certification for each pollutant analyzed.
- 3.11 If the Permittee monitors any pollutant at the location(s) designated more frequently than required by this permit using the approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the applicable Discharge Monitoring Report Form (PVSC Form MR-1 or MR-2). Such increased frequency shall also be indicated.

4. MANAGEMENT RESPONSIBILITIES

- 4.1 **RIGHT OF ENTRY:** The Permittee shall allow the authorized representatives of the PVSC, upon presentation of credentials to:
 - (a) Have immediate access to all the facilities directly or indirectly connected to the PVSC Treatment Works during normal working hours and at such other times as may be necessary during emergencies as determined by PVSC. No person shall interfere with, delay, or refuse entrance to a PVSC Inspector attempting to inspect the facility.
 - (b) Inspect the monitoring equipment and monitoring methods required in this permit or to sample any discharge of wastewater, copy any records required to be kept by this permit or PVSC Rules and Regulations and inspect and/or sample RCRA or other type waste or substances.
- 4.2 TRANSFER OF OWNERSHIP OR CONTROL: This Permit is not transferable. This permit shall not be reassigned, transferred or sold to a new owner, new industrial user, or a new or changed operation. The Permittee shall notify the Chief Executive Officer in writing within (14) days of any sale or transfer of the industrial operations/facility covered by this Permit, or of any sale or transfer affecting the identity of those holding a controlling interest in the Permittee. The Permittee shall also provide written notice to the succeeding owner or controller of the existence of this Sewer Use Permit and the need to apply for a new permit. For purposes of this provision, the term "controlling interest" shall mean an interest held by a person or entity, or group of persons or entitles, who possess, directly or indirectly, the power to direct or cause the direction of the management and policies of the Permittee.

4.3 CHANGE IN DISCHARGE: Any change in the discharge, any anticipated facility expansion, production increases, or modification which will result in new, different, or increased discharges of pollutants regulated by PVSC must be reported by submission of a new Passaic Valley Sewerage Commissioners Sewer Use Application. If such changes will not violate the effluent limitations specified in this permit, then notice only to PVSC of such changes is required. Following such notice the permit may be modified to specify and limit any pollutants not previously limited.

5. OTHER CONDITIONS

- 5.1 <u>PERMIT MODIFICATION:</u> After notice and opportunity for a hearing, this permit may be modified, or revoked in whole or in part during its term for cause including, but not limited to the following:
 - (a) Violating any terms or condition of this permit;
 - (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 5.2 TOXIC POLLUTANTS: Notwithstanding Section A Part 2 of this permit, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition), is established under Section 307(b) of the Federal Water Pollution Control Act, its amendments, or any other subsequent law or regulation for a toxic pollutant which is present in the discharge, and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

- 5.3 <u>CIVIL AND CRIMINAL LIABILITY:</u> A violation of the PVSC Rules and Regulations or a violation of any term or condition contained in this Sewer Use Permit may subject the Permittee to enforcement and civil penalties of up to \$50,000 per day for each violation, and each day's continuance of the violation shall constitute a separate violation. Enforcement may include the institution of a civil action for injunctive relief and/or to recover civil penalties and/or referral to the appropriate agency for criminal enforcement.
- 5.4 STATE LAWS: Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State Law or regulation under authority preserved by Section 510, (33 U.S.C.A. § 1370) of the Federal Water Pollution Control Act as amended.
- 5.5 **PROPERTY RIGHTS:** The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or Regulations.
- 5.6 SEVERABILITY: The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

5.7 **DEFINITIONS:** The following definitions apply to this permit:

- (a) "Composite" a combination of individual samples obtained at regular intervals over the entire discharge day.
- (b) "Daily" each operating day.
- (c) "Daily Maximum Discharge" the highest discharge by weight or other appropriate units, as specified herein, during any calendar day.
- (d) "Grab" an individual sample collected in less than 15 minutes.
- (e) "Immediate Access" access without delay but in no event beyond 10 minutes from the time the request is made known to the guard or employee.
- (f) "Monthly" one day each month during a normal operating day.
- (g) "Monthly Average Value" the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during the month. Results may be expressed in mass loadings per day or concentration. The monthly average value does not apply to those parameters that are continuously monitored.
- (h) "N/A" not applicable.
- (i) "Quarterly" every three (3) months.
- (j) "Weekly" one day each week during a normal operating day.

PASSAIC VALLEY SEWERAGE COMMISSIONERS 600 WILSON AVENUE NEWARK, NEW JERSEY 07105

SIU FACT SHEET

Draft Sewer Use Permit to discharge into Passaic Valley Treatment Plant

(Company Name): Sandvik Coromant Company has submitted a completed Sewer Use Application for a Sewer Use Permit Renewal to discharge into the treatment works

| NAME & ADDRESS OF APPLICANT | NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS |
|--------------------------------|---|
| Sandvik Coromant Company | Sandvik Coromant Company |
| 1702 Nevins Road | 1702 Nevins Road |
| Fairlawn New Jersey 07410 | Fairlawn New Jersey 07410 |

Description of Facility Operations: Cutting Tools and Holders

Number of Outlets: Industrial - 1

Sanitary - 1

Basis for Permit Conditions: Volume, Strength, & Pretreatment Equipment

Type of Pretreatment Equipment Installed: Continuous pH Recorder

Duration of Sewer Use Permit: 5 Years

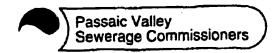
Special Conditions or Remarks: Renewal, No Changes

P06

IRENE 13. ALMEIDA CHARLAN

JAMES KRONE VICE CHAIRMAN

FRANK J. CALANDRIELLO, JR. DOMINIC W. CUCCINELLO CARL S. CZAPLICKI, JR. PETER A. MURPHY ANGELINA M. PASERCHIA THOMAS J. POWELL DONALD TUCKER COMMISSIONERS



SANDUIK COROMANT → 919733444876

500 WILSON AVENUE NEWARK, NJ 07105 (973) 344-1800 Fax: (973) 344-2951 www.pvsc.com

ROBERT J. DAVENPORT EXECUTIVE DIRECTOR PETER G. SHERIDAN

CHIEF COUNSEL LOUIS LANZILLO CLERK

Industrial Department Fax: (973) 344-4876 July 19, 2000

> CERTIFIED RECEIPT Z 282 911 729

Mr. William Durow Sandvik Coromant Company 1702 Nevins Road Fairlawn, New Jersey 07410

RE: REVISIONS TO SEWER USE PERMIT

Dear Mr. Durow:

Enclosed are the revisions to your Industrial Sewer Use Permit. Please review and attach these changes to your existing Permit accordingly.

If you have any questions, please feel free to contact Anthony Gammaro at (973) 817-5716.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Manager of Industrial & Pollution Control

FPD/np

Enclosure

Borough of Fairlawn CC:

1 of 21

PASSAIC VALLEY SEWERAGE COMMISSIONERS

SEWER USE PERMIT

| Permit# | 08401682 |
|-------------|----------|
| 2 01 2410 " | |

(Please use the Permit Number on any correspondence with PVSC)
In compliance with the provisions of the Federal Water Pollution Control Act, its amendments, the Clean Water Act and Rules and Regulations of the Passaic Valley Sewerage Commissioners.

SANDVIK COROMANT COMPANY

| (herein, after referred to as the Permittee) is authorized to discharge from a facility located at |
|--|
| 1702 NEVINS ROAD |
| FAIRLAWN, NEW JERSEY 07410 |

to the Passaic Valley Sewerage Commissioners Treatment Works in accordance with discharge limitations, monitoring requirements and other conditions set forth herein.

EXPIRATION DATE 02/24/2001

PASSAIC VALLEY SEWERAGE COMMISSIONERS

EXECUTIVE DIRECTOR

REV: 08/97 07/2000

(b) Beginning (05/01/97) and lasting through (02/24/2001) the Permittee is authorized to discharge from outlet number (08401681-18055-0081). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. (After Treatment). The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C). (8 inch discharge line – G.C. area). The sample point is located downstream of the cyanide destruct system. The Permittee shall submit volume and analysis results in accordance with PVSC Pretreatment Discharge Monitoring Report Form MR-1.

| | DISCHARGE | LIMITATIONS | MONITORING REQUIREMENTS | | |
|-----------|-----------|-------------|----------------------------|----------------|---------------------|
| PARAMETER | | , | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| CN(T) | xxxxx | XXXXX | Quarterly | Grab | Monthly |
| Volume | xxxxx | xxxxx | XXXXX | xxxxx | Monthly |

Rev: 07/2000

Beginning (05/01/97) and lasting through (02/24/2001) the Permittee is authorized to discharge from outlet (b) number (08401681-18055-0081). Such discharge shall be monitored as specified below. The table lists the limitations or procedures applicable to this outlet. (Before Treatment). The volume shall be determined from the readings on the process meter (B) less the readings on the make-up to cooling tower meter (C). (8 inch discharge line - G.C. area). The sample point is located before the connection to the cyanide destruct system. The Permittee shall submit volume and analysis results in accordance with PVSC Pretreatment Discharge Monitoring Report Form MR-1.

| | DISCHARGE LIMITATIONS | | | MONITORING REQUIREMENTS | |
|-----------|-----------------------|-------|--------------------------|----------------------------|---------------------|
| PARAMETER | | | MEASUREMENT FREQUENCY | SAMPLE TYPE | REPORTING PERIOD |
| CN (T) | xxxxx | XXXXX | Quarterly | Grab | Monthly |
| Volume | xxxxx | xxxxx | xxxxx | xxxxx | Monthly |

Rev: 07/2000

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SECTION A

CONDITION SPECIFIC TO THIS PERMIT

1. Sampling

12:19

- 1.1 Samples and measurements taken as required under this permit shall be representative of the monitored activity. All samples shall be taken at the monitoring points approved by the PVSC and specified in this permit. Unless other wise specified, all samples shall be drawn by a 24-hour composite sampler acceptable to the PVSC which shall be equipped with attachments appropriate for affixing seals. During and after collection, the sample shall be maintained between 1°C 4°C.
- 1.2 In addition to the other sample requirements set forth in SECTION A, PART 2 of this permit, the Permittee shall comply with the following:
 - (a) For User Charge, the Permittee shall install a 24 hour composite sampler on Outlet (s) #08401681 which shall be maintained in proper working order at all times.
 - (b) Samples that are taken for heavy metal analysis must be drawn by an automatic 24-hour composite sampler. A grab sample is not acceptable for metals compliance determination.

REV: 08/97 07/2000

ANNUAL REPORT

by

Chief Engineer S. A. LUBETKIN

to the

PASSAIC VALLEY SEWERAGE COMMISSIONERS

FOR THE YEAR

1972

PART II - (continued)

| Nabisco Inc. Co., Fair Lawn | 198 199 199 200 201 202 203 |
|---|--|
| Otis Elevator Company, Harrison | 203 |
| Pantasote Company, Passaic | 204 204 210 211 212 213 213 216 |
| Ridgewood Pollution Control Plant, Glen Rock | 216 217 |
| P. Saldutti and Son, Newark | 217 218 219 219 220 221 222 223 |
| Tenneco Chemicals, Inc., Garfield | 226 226 |
| Union Building & Construction Corporation, Clifton Universal International Industries, Inc., Newark | 228 229 |
| PART III - POLLUTION VIOLATIONS TO THE PASSAIC RIVER AND ITS TRIBUTARIES IN THE COMMISSIONERS' DISTRICT THAT WERE STILL POLLUTING AS OF THE END OF 1972 | |
| Clifton, City of Clifton Clothing Co., Wallington Kearny, Town of Marcal Paper Mills, Inc., East Paterson Monsanto Company, Kearny National Standard Co., Clifton Newark, City of | 230 231 232 232 233 236 237 |
| Orange, City of | 241 243 |

Violation and Elimination - P. Saldutti & Son - continued

On May 30, during the rainstorm, Mr. McLaughlin visited the area again and saw that the spillage and poor house-keeping still existed and that there was a visible oily run-off from the property to the catch basin (thence to the Passaic River). The dispatcher on duty at 2:30 P.M. of this day was notified and shown the condition.

On June 8, Mr. Lubetkin wrote to Mr. Chirls, President of the company, confirming Mr. Mc Laughlin's visit, and requesting information on what would be done to halt the pollution. On June 9, Mr. Chirls replied, saying they would seek professional advice on a means to overcome the problem, and as soon as possible put into effect corrective methods.

On July 6, 1972, Inspector McLaughlin made an inspection and reported that there was a general cleanup and removal of oil soaked debris. A sign had been placed by the fuel pump, instructing drivers to replace hose properly. Mr. Chirls, Jr. had also instructed personnel on proper housekeeping for the future.

Violation and Elimination - Sandvik Steel Inc., 1702
Nevins Road, Fair Lawn
April 18, 1972
(T. Costello)

Inspectors T. Costello and M. Tomaro, while investigating a complaint about dumping of debris and garbage along the river banks at Maple Avenue in Fair Lawn, found oil entering the Passaic River from Henderson Brook at about 3:30 P.M. This was traced to Sandvik Steel at about 4:15 P.M. The plant manager, Mr. R. De Lucia explained that at 7 A.M. they found a broken oil pressure guage. Oil flowed from this guage to a sump and was then pumped into Henderson Brook, via a 24" storm drain. The guage was repaired at 7:30 A.M. but an undetermined amount of #4 fuel oil had already been pumped to the stream.

Inspection revealed a considerable amount of oil was trapped by debris (acting as a baffle). Mr. DeLucia promised to contact a service company to remove the trapped oil and clean the stream.

Violation and Elimination - Sandvik Steel Inc. - continued

On April 19, at 9:30 A.M., the Tony Gaess Service Corp. of Hillsdale, New Jersey, began pumping trapped oil into a tank truck. Clean-up operations were completed at 8:30 P.M.

On April 20, Mr. DeLucia had maintenance men remove the oily sand from the mouth of the storm drain.

Violation and Elimination - S. Schwied's Slaughter House, 238 East Fifth Street, Paterson, N.J. May 22, 1972 (L. Tateo)

At 10:00 A.M. on Monday, May 22, while making his inspection, Mr. Tateo noticed a blood-like discharge seeping from underneath the premises of this company and going into the river. Mr. Schwied (Vice President) was notified and after determining it was from a sewer back-up, he contacted a sewer cleaning company. They arrived at 11:00 A.M. and attempted to clean the line (going in about 96 feet), but the back-up continued, so they left.

Mr. John Anderson of the City of Paterson was called by Mr. Tateo and asked if he would check the city sewer nearby. He had his crew check the street sewer and found a blockage about 30 feet from a manhole and removed it, thus eliminating the river discharge and pollution. This was completed at 1:45 P.M. on the same day.

Violation and Elimination - Scheps Cheese Corp.,

168 East Main Street, Prospect Park, New Jersey

December 17, 1971 to January 14, 1972 (T. Costello)

On November 26, 1971, an anonymous letter was sent to Mr. Richard Sullivan, Commissioner of the Department of Environmental Protection (received December 6, 1971) complaining about the Scheps Cheese Company dumping residue of cheese manufacturing into the river. A copy of this letter was sent to Mr. Lubetkin on December 13 (received December 17) and Mr. Lubetkin assigned Inspector T. Costello to investigate and report.

ANNUAL REPORT

Chief Engineer
S. A. LUBETKIN

to the

PASSAIC VALLEY

SEWERAGE COMMISSIONERS

FOR OPERATIONS DURING

THE YEAR

PASSAIC RIVER TRIBUTARIES BETWEEN THE GREAT FALLS AND THE MOUTH AT NEWARK BAY

| NO. | NAME OF TRIBUTARY | |
|------|---------------------|--|
| 1 2 | Allendale Brook | Enters Ho-Ho-Kus Brook at Waldwick |
| 2 | Allwood Brook | Enters Nichols Pond at Nutley(Kingsland Rd.) |
| 3 | Beaverdam Brook | Enters Saddle River at Fair Lawn |
| 4 | Colesberg Brook | Enters Saddle River at Saddle Brook |
| 5 | Dahnert's Brook | Enters Passaic River at Garfield |
| 6 | Delford Brook | Enters Sprout Brook at Paramus |
| 7 | Dead Horse Creek | Enters Franks Creek at Kearny |
| 8 | Diamond Brook | Enters Passaic River at Fair Lawn |
| 9 | Feld's Brook | Enters Saddle River at So. Hackensack |
| 10 | Fleishers Brook | Enters Passaic River at Garfield |
| 11 | Franklin Tpk. Brook | Enters Ho-Ho-Kus Brook at Waldwick |
| 12 | Franks Creek | Enters Passaic River at Kearny |
| 13 | Glen Ave. Brook | Enters Ho-Ho-Kus Brook at Ho-Ho-Kus |
| 14 | Goffle Brook | Enters Passaic River at Hawthorne |
| 15 | Harrison Creek | Enters Passaic River at Newark |
| 16 | Henderson Brook | Enters Passaic River at Hawthorne |
| 17 | Ho-Ho-Kus Brook | Enters Saddle River at Fair Lawn |
| 18 | Jordan Brook | Enters Saddle River at Fair Lawn |
| 19 | Lawyer's Ditch | Enters Passaic River at Newark |
| 20 · | Lodi Brook | Enters Saddle River at Lodi |
| 21 | Mac Donalds Brook | Enters Hughes Lake and Passaic River at Passaic |
| 22 | Mannings Brook | Enters Sprout Brook at Paramus |
| 23 | Millbank Brook | Enters Saddle River at Lodi |
| 24 | Nichols Brook | Enters Nichols Pond and Third River at Nutley |

PASSAIC RIVER TRIBUTARIES (continued)

| NO. | NAME OF TRIBUTARY | |
|-----|-------------------|--|
| 25 | Nishuane Brook | Enters Wigwam Brook at Orange |
| 26 | Notch Brook | Enters Pearl Brook at Clifton |
| 27 | Pearl Brook | Enters Third River at Bloomfield |
| 28 | Pehle Brook | Enters Saddle River at Saddle Brook |
| 29 | Pershing Brook | Enters Weasel Brook at Clifton |
| 30 | Plogs Brook | Enters Weasel Brook at Clifton |
| 31 | Plum Creek | Enters Passaic River at Newark |
| 32 | Prospect Brook | Enters Saddle River at Glen Rock |
| 33 | Ramsey Brook | Enters Ho-Ho-Kus Brook at Allendale |
| 34 | Saddle River | Enters Passaic River at Garfield- Wallington Line |
| 35 | St. Andrews Brook | Enters Sprout Brook at Paramus |
| 36 | Schroeders Brook | Enters Dahnerts Pond at Garfield |
| 37 | Second River | Enters Passaic River at Newark - Belleville Line |
| 38 | Solomon Brook | Enters Allwood Brook at Clifton |
| 39 | Sprout Brook | Enters Saddle River at Rochelle Park |
| 40 | Styertowne Brook | Enters Allwood Brook at Clifton |
| 41 | Tony's Brook | Enters Second River at Bloomfield |
| 42 | Third River | Enters Passaic River at Nutley |
| 43 | Wabash Brook | Enters Passaic River at Clifton (north |
| 44 | Wagaraw Brook | Enters Passaic River at Hawthorne |
| 45 | Waldwick Brook | Enters Ho-Ho-Kus Brook at Waldwick |
| 46 | Washington Brook | Enters Goffle Brook at Hawthorne |
| 47 | Watsessing Brook | Enters Wigwam Brook in Watsessing Park, Bloomfield |
| 48 | Weasel Brook | Enters Passaic River at Passaic |
| 49 | Westerly Brook | Enters Saddle River at Rochelle Park |
| 50 | Wigwam Brook | Enters Second River in Watsessing Park, Bloomfield |
| | | |
| 51 | Zabrieskie Brook | Enters Saddle River at Ho-Ho-Kus |

KLL004862

NEWARK BAY

SPECIAL REPORT #5 (FROM JANUARY-FEBRUARY 1975 REPORT) THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT

As everyone knows, or should know by now, all dischargers into "navigable" waters of the United States are required to apply for a NPDES Permit from the USEPA. This is required by the Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500, Section 402(a)(1) et seq, (33 U.S.C. Par. 1251-1376). The "navigable" waters are defined in the Act as "the waters of the United States, including the territorial seas" Sec. 502(7).

This refers to any discharges from industries, municipalities, sewer authorities, etc., which may contain polluting materials. This requirement is probably the best single requirement in the Act, as it will enable the USEPA, once and for all, to make an accurate assessment of the total pollution in the United States.

The Permit itself can be quite an extensive document, depending upon the particular discharge being permitted.

Generally speaking, each permit locates the discharge and the receiving waters. It defines the allowable quality and quantity, and if the discharge exceeds legal standards, it sets a "Schedule of Compliance" with interim dates of performance. It sets up monitoring and report requirements so that the USEPA is able to tell if violations occur and that compliance schedules are being met.

In addition, if the permittee is a municipality or a public authority, there are many other requirements such as mandatory controls of connected industrial discharges, pretreatment requirements, cost recovery requirements, infiltration requirements, etc.

The PVSC had received its NPDES Permit effective February 28, 1975 and had started implementing the vast data gathering necessary to translate the Federal Guidelines into regulations. In order to fully comply, cooperation is needed from both industrial users and municipal users. To inform the major industries what was expected from them, the PVSC had set two days of meetings (March 25 and 26) with four separate meetings of three hours each (this was necessary, since all industries could not be accommodated at once). Attendance was by invitation only (because of the limitation on space).

The municipalities were informed by letter of what was required of them, and a similar conference will be held at a later date to discuss PVSC rules and regulations.

The following are the critical dates and requirements of the Passaic Valley Sewerage Commissioners' Permit:

- (1) Self-monitoring reports are to be on a quarterly basis and must be submitted within 28 days after the end of each report period. The first report period started March 1, 1975 and ended May 31, 1975, with subsequent report periods ending August 31, November 30, and February 28/29. (This is EPA Form 3320-1)
- (2) On March 31 and September 30 of each year, PVSC must submit a report summarizing the progress of all non-complying major industries subject to pretreatment requirements with details, as included in the Permit.

The first report (March 31, 1975) contained a proposed schedule for determining the required pretreatment information. After approval by EPA, PVSC shall implement the schedule.

- (3) The following compliance schedules are in the Permit and a report must be made to EPA within 14 days following each date on the schedule:
 - (a) August 31, 1975 PVSC must initiate whatever actions are needed to enable PVSC to enforce all pretreatment requirements necessary, and PVSC must notify the Regional Administrator and the State Agency of actions it intends to take to comply with this (pretreatment standard) regulation.
 - (b) August 31, 1975 PVSC must report to EPA on the maximum treatable flow rates for the treatment plant or any complete unit process.
 - (c) February 28, 1976 PVSC shall report to EPA on a proposed method for estimating the number and location of new sewer connections, which will be served by combined sewers, and a proposed method for estimating the impact of additional flows generated by these sewer connections on the volume of discharges from the combined sewer.

- (d) February 28, 1976 PVSC shall submit a detailed design report, together with plans and specifications, together with a Step 3 Grant Application, on upgrading their facilities.
- (e) June 30, 1976 PVSC shall submit to the EPA an interim operational plan designed to minimize the discharge of pollutants from combined sewer overflows and bypasses.
- (f) August 31, 1976 PVSC shall submit the results of its Phase I Infiltration/Inflow Analysis.
- (g) August 31, 1976 PVSC shall submit to EPA the analysis of overflows and bypasses due to rain fall, including the duration curves to determine quality of by-pass storm water and its effect on the river.
- (h) December 31, 1976 PVSC shall apply for a renewal of the NPDES Permit, which expires June 30, 1977.
- (i) June 30, 1977 PVSC shall make a report with recommendations concerning alternate plans for corrective action for alleviating and/or treating of overflow discharges, including cost estimates.

Permit No.: NJ0021016

RECEIVED

Name of Permittee:

hu 11 10 57 AN 175 Passaic Valley Sewerage Commission

Effective Date: February 28, 1975

DEPT. ENVIR PROTEOT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT TO DISCHARGE

In reference to the application received from the above-mentioned permittee for a permit authorizing the discharge of pollutants in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P. L. 92-500, October 18, 1972 (33 U.S.C. §§1251-1376) (hereinafter referred to as "the Act").

Passaic Valley Sewerage Commissioners (P. V. S. C.)

(hereinafter referred to as "the Permittee")

is authorized by the Regional Administrator, Region II, U.S. Environmental Protection Agency, to discharge from:

the P.V.S.C. Sewage Treatment Plant, 600 Wilson Avenue, Newark, New Jersey, and other locations noted herein

to receiving waters named Upper New York Bay, Third River, Newark Bay, Passaic River, and other receiving waters noted herein in accordance with the following conditions.

A. GENERAL CONDITIONS

- All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act. Facility modifications, additions, and/or expansions that increase the plant capacity must be reported to the the permitting authority and this permit then modified or reissued to reflect such changes. Any anticipated change in the facility discharge, including any new significant industrial discharge or significant changes in the quantity or quality of existing industrial discharges to the treatment system that will result in significant new or increased discharges of pollutants must be reported to the Regional Administrator. Modifications to the permit may then be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.
- 2. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
 - a. violation of any terms or conditions of this permit;
 - b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or,
 - c. a change in any condition that required either a temporary or permanent reduction or elimination of the permitted discharge.
- 3. Notwithstanding 2 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be notified.
- 4. The permittee shall allow the head of the State water pollution control agency, the Regional Administrator, and/or their authorized representatives, upon the presentation of credentials:

- a. to enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit;
- c. to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;
- d. to sample at reasonable times any discharge of pollutants;
- e. to inspect the operation of the treatment facilities.
- 5. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations; nor does it obviate the necessity of obtaining State or local assent required by law for the discharge authorized.
- 6. This permit does not authorize nor approve the construction of any onshore or offshore physical structures of facilities or the undertaking of any work in any navigable waters.
- 7. Except for data determined to be confidential under Section 308 of the Act, all monitoring reports required by this permit shall be available for public inspection at the offices of the head of the State water pollution control agency and the Regional Administrator. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.
- 8. The diversion or bypass of any discharge from the treatment works by the permittee is prohibited, except: (1) where unavoidable to prevent loss of life or severe property damage; or (2) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the terms and conditions of this permit. The permittee shall notify the Regional Administrator in writing within 72 hours of each diversion or bypass in accordance with the procedure specified above for reporting non-compliance. Within 30 days after such incident the permittee shall submit to EPA for approval a plan to prevent recurrence of such incidents. Normal operation of overflows and bypasses (listed in Section C-1) should not be reported under the requirements of this condition. The notification and plan herein required apply only to discharges resulting from unusual situations such as breakdowns, power failures, and bypasses occurring during dry weather periods. A summary description of discharges from bypass points should be submitted with the permittee's quarterly self-monitoring reports.

- 9. If for any reason the permittee does not comply with or will be unable to comply with any effluent limitation (treated effluent discharges) specified in this permit, or should any unusual or extraordinary discharge of wastes occur from the facilities herein permitted, the permittee shall immediately notify the Regional Administrator and appropriate State agency by telephone and provide the same authorities with the following information in writing within five days of such notification:
 - a. A description of the non-complying discharge including its impact upon the receiving waters.
 - b. Cause of non-compliance.
 - c. Anticipated time the condition of non-compliance is expected to continue, or if such condition has been corrected, the duration of the period of non-compliance.
 - d. Steps taken by the permittee to reduce and eliminate the non-complying discharge.
 - e. Steps to be taken by the permittee to prevent recurrence of the condition of non-compliance.
- 10. Permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from non-compliance with any effluent limitation specified in this permit. The permittee will also provide accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
- 11. Except as provided in permit condition 8 on bypassing, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for non-compliance.
- 12. Nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.
- 13. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator and the State water pollution control agency.

- 14. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- 15. The permittee shall require the municipalities using the PVSC treatment works to report the following conditions to the permittee; the permittee shall then provide notice of the following to the Regional Administrator:
 - a. any new introduction of pollutants into such treatment works from a source which would be a new source as defined in section 306 of the Act if such source were discharging pollutants;
 - b. any new introduction of pollutants which exceeds 10,000 gallons on any 1 day into such treatment works from a source which would be subject to section 301 of the Act if such source were discharging pollutants; and,
 - c. any substantial change in volume or character of pollutants being introduced into such treatment works by a source introducing pollutants into such works at the time of issuance of the permit.

Such notice shall include information on the quality and quantity of effluent to be introduced into such treatment works; and an anticipated impact of such change in the quantity or quality of effluent to be discharged from such publicly owned treatment works.

16. The permittee shall require any industrial user of such treatment works to comply with the requirements of section 204(b), 307, and 308 of the Act. For compliance with section 204(b) of the Act, the permittee shall comply with Special Condition #3 of Federal Construction Grant No. C-34-369, and shall establish a system of user charges and industrial cost recovery in accordance with proposed regulations amending 40 CFR, Part 35, published in the Federal Register dated May 22, 1973, or any subsequent revisions.

For compliance with section 307 of the Act, the permittee shall meet the data collection, and other requirements of section C-2, "Schedule of Compliance for Industrial Discharge Information" in this permit.

- 17. The permittee shall require any industrial user of storm sewers owned by the PVSC to comply with the requirement of section 308 of the Act.
- 18. The United States Army Corps of Engineers conducts maintenance dreaming of serioshie waters and their tributeries pursuent to carried the states of the page like the states of the page like these laws of the page like these laws are of the page like these laws are of the page like these laws, any person, from or other entity discharging suspendents unto a navigable waterway of the United States, or industriant series of that waterway may be required to participate in the maintenance dredging program.

B. REQUIRED EFFLUENT LIMITATIONS AND MONITORING

AND OPERATIONAL REQUIREMENTS

1.A. REQUIRED EFFLUENT LIMITATIONS

During the period beginning on the effective date of this permit and lesting until the date of expiration of this permit, discharges shall be limited and monitored by the permittee as specified below:

- a. A significant removal of settleable solids shall be achieved.
- b. See Table I.
- c. The permittee shall act to significantly reduce the concentration of floating solids prior to discharge and, except as specifically authorized in this permit, the permittee shall not discharge visible foam.
- d. The effluent values for pH shall remain within the limits of 6.0 to 9.0.
- e. From information supplied by the permittee, the design average daily flow of 225 MGD is regularly being exceeded. The preceding effluent limitations will be the determining factors in judging if this facility is adequately treating its wastewater.

1.B. ADDITIONAL EFFLUENT LIMITATION

Starting on May 15. 1975, the chlorination facilities shall be operated continuously year round. A chlorine residual concentration of not less than 0.5 mg/l shall be maintained in the effluent at all times unless the permittee demonstrates compliance with the following:

The geometric mean of the fecal coliform bacteria values for effluent samples collected in a period of 30 consecutive days shall not exceed 200 per 100 milliliters. The geometric mean of these values for effluent samples collected in a period of seven consecutive days shall not exceed 400 per 100 milliliters.

* Subject to change to an earlier date if so determined by the New Jersey Department of Environmental Protection after conclusion of their administrative hearing procedure presently underway.

2. FACILITY OPERATION AND QUALITY CONTROL

All waste collection, control, treatment and disposal facilities shall be operated in a manner consistent with the following:

- a. At all times, all facilities shall be operated as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance with the conditions of this permit.
- c. Routine maintenance of treatment facilities that results in degradation of effluent quality shall be scheduled during noncritical water quality periods and shall be carried out in a manner approved by the permitting authority.
- d. Under no circumstances shall the permittee allow introduction of the following wastes into the waste treatment system:
 - aa. Wastes which create a fire or explosion hazard in the treatment works.
 - bb. Wastes which will cause corrosive structural damage to treatment works.
 - cc. Solid or viscous substances in amounts which cause obstructions to the flow in sewers or interference with the proper operation of the treatment works.
 - dd. Wastewaters, at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so as to cause a loss of treatment efficiency. This condition does not constitute an exception to condition C-4(A)(i)(2).

3. SELF-MONITORING AND REPORTING REQUIREMENTS

a. The permittee shall effectively monitor the operation and efficiency of all treatment and control facilities and the quantity and quality of the treated discharge. Monitoring data required by this permit shall be summarized on an average calendar month basis. Individual reports are to be submitted on a quarterly basis. Duplicate original copies of the discharge monitoring report form (EPA Form 3320-1), properly completed and signed by the permittee, must be submitted within 28 days after the end of each report period to the

Regional Administrator and the State Agency at the following addresses:

U.S. Environmental Protection Agency Region II Status of Compliance Branch 26 Federal Plaza New York, New York 10007

Director
Division of Water Resources
New Jersey Department of
Environmental Protection
Labor & Industry Building
P.O. Box 1390
Trenton, New Jersey 08625

Quarterly reports will be required for periods beginning on the first day of the first month following the issuance of this permit. The data collected and submitted shall include the following parameters and testing frequencies:

See Table I

Samples and measurements of the effluent taken to achieve compliance with the monitoring requirements specified above shall be taken at the point of combined flow into the outfall sewer.

Samples and measurement of the influent wastewater taken to meet the monitoring requirements specified above shall be taken at the point of plant inflow.

b. Sampling and Analysis Methods

Other measurements of oxygen demand can be substituted for Biochemical Oxygen Demand (BOD) where the permittee can demonstrate long-term correlation of the method with BOD values. Substitution of such measurements must receive prior approval of the permitting authority.

The analytical and sampling methods used shall conform to the latest edition of the reference methods listed below. (These are interim references to be replaced by Sec. 304(g) guidelines when available.) However, different but equivalent methods are allowable if they receive the prior written approval of the permitting authority.

- 1. STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATERS, 13th edition, 1971, American Public Health Association, New York, New York 10019.
- 2. A.S. T.M. STANDARDS, PART 23, WATER; ATMOSPHER-IC ANALYSIS, 1972, American Society for Testing and Materials, Philadelphia, Pa. 19103.
- 3. METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, April 1971, U.S. Environmental Protection Agency, Water Quality Office, Analytical Quality Control Laboratory, 1014 Broadway, Cincinnati, Ohio 45202.

The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to insure accuracy of measurements.

4. RECORDING

The permittee shall record for all samples the date and time of sampling, the sampling method used, the date analyses were performed, the identity of the analysts, and the results of all required analyses and measurements.

All sampling and analytical records mentioned in the preceding paragraph shall be retained for a minimum of three years. The permittee shall also retain all original recordings from any continuous monitoring instrumentation, and any calibration and maintenance records, for a minimum of three years. These periods will be extended during the course of any unresolved litigation, or when so requested by the Regional Administrator.

5. SOLIDS DISPOSAL

Collected screenings, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into navigable waters or their tributaries.

The permittee shall cooperate with the U.S. Environmental Protection Agency in the development of a sludge management program aimed at eliminating ocean disposal of sludge, and shall cooperate with other operating agencies in exploring solutions to sludge management and disposal problems.

TABLE I

SELF-MONITORING REQUIREMENTS (Discharge 001) 1/

Parameter

otal Flow, mgd

D , mg/1

D , lbs/day*

Hileable Solids, ml/1

Ispended Solids, mg/1

Ispended Solids, lbs/day*

Hisidual Chlorine, mg/1 2/

Hecal Coliform, N per 100 ml 2/

Minimum Monitoring Requirements Measurement Frequency Sample Type

| Continuous | N/A | | |
|------------|-----------------|--|--|
| Daily | 24-hr composite | | |
| 6 per day | Grab | | |
| Daily | 24-hr composite | | |
| 6 per day | Grab | | |
| Daily | Grab | | |
| 6 per day | Grab | | |

Except where indicated influent and effluent measurement and testing are required.

/ Only effluent testing required.

* To be calculated using actual flow and actual testing results for parameters noted.

SECTION C

Special Conditions and Schedules for Compliance with Permit Limitations

Contents

| C-1. | Descriptive Listing of Discharge Points |
|------|---|
| C-2. | Industrial Discharge Compliance Schedule |
| C-3. | Sewer System Evaluation and Rehabilitation Compliance Schedul |
| C-4. | Wet Weather Flow Study Compliance Schedule |
| C-5. | Facilities Upgrading Compliance Schedule |

Compliance Reporting Requirements (1)

The Permittee shall comply with the following schedules and shall report to the Regional Administrator and the State Agency within 14 days following each date on the schedules detailing its compliance or non-compliance (2) with the schedule date and requirements.

C-1 <u>Descriptive Listing of Discharge Points</u>

A. Discharge Points Owned by the Permittee

discharge Serial Number

#001 Upper New York Bay

#002 Newark Bay

#003 Confluence of Third River and Passaic

#004 Confluence of Third River and Passaic River

#005 Passaic River

#006 Passaic River

#007 Passaic River Discharge Description and Location (approximate U.S.G.S. Cor.)

Outfall for treated effluent, extends 3200 feet from shore to a depth of 40-60 feet. (40°42'45"N, 74°03'42" W)

Newark Bay Bypass for treated effluent. (40°42'45N, 74°07'24"W)

Yantacaw St. Bypass, Clifton (40^o49'17"N, 74^o7'53" W)

Yantacaw Pumping Station Overflow, Clifton (40049'16" N, 7407'56" W)

Wallington Pump Station Bypass, Wallington (40°51'26" N, 74°7'9"N)

North Arlington Branch Overflow ... North Arlington (40⁰47'12"N 74⁰7'51"W)

Hudson St. Overflow, Paterson (40°55'27" N, 74°10'7" W)

Discharge Points Not Owned by the Permittee which work in conjunction with the Permittee's System and which are to be included as part of Section C-4 , wet weather flow study.

Discharge Serial Humber and Receiving Meen

#008 "Passaic River

#009 Passaic River

#010 Passaic River

#011 Passaic River

#012 Passaic River

#013 Passaic River

#014 Passaic River

#015 Passaic River

#016 Passaic River

#017 Passaic River

Discharge Description and Location (approximate U.S.G.S. Cor.)

East Newark, Central Avenue Overflow (40⁰35'03" N, 74⁰09'55" W)

Garfield, Garden State Bypass (40°53'10" N, 74°07'44" W)

New Street, Harrison Overflow (40°44'49"N, 74°09'56" W)

Cleveland Street, Harrison Overflow (40°44'45"N, 74°09'56" W)

Harrison Avenue, Harrison Overflow (40°44'42" N, 74°09'56" W)

Dey Street, Harrison Overflow (40°44'33" N, 74°09'53" W)

Middlesex Street, Harrison Overflow (40°44'33" N, 74°09'53" W)

Bergan Street, Harrison Overflow (40°44'25" N, 74°09'49" W)

Worthington Ave., Harrison Overflow (40°44'21" N, 74°08'41" W)

Stewart Ave., Kearny Overflow (40⁰46'46" N. 74⁰07'55" W)

KLL006263

#018 Passate River

4019 Passaic River

Passaic River

#021 Passaic River

#022 Passaic River

#023 Franks Creek thence to Passaic River

#024 Franks Creek thence to Passaic River

#025 Franks Creek thence to Passaic River

#026 Franks Creek, a tributary of the Passaic River

#027 Passaic River

#028 Passaic River

#029 Passaic River Washington Ave., Kearny Overflow (40946 37" N, 74 08'00" N)

Bergen Ave., Kearny Overflow (40⁰45'43" N, 74⁰09'40" N)

Nairn Ave., Kearny Overflow (40°45'33" N, 74°09'46" W)

Marshall Street, Kearny Overflow (40045'24" N, 74009'51" W)

Johnston Ave., Kearny Overflow (40°45'16" N, 74°09'52" W)

Ivy Street, Franks Creek Overflow, Kearny (40°45'34" N, 74°08'30" W)

Bergen St., Franks Creek Overflow, Kearny (40°45'09" N, 74°08'14" W)

Tappan St., Franks Creek Overflow, Kearny (40°45'01" N, 74°08'12" W)

Duke St., Franks Creek Overflow, Kearny (40°44'58" N. 74°08'10" W)

Lodi force main bypass, Passaic (45°51' 25" N, 74°07'13" W)

Verona Ave., Newark Bypass (40⁰46'35" N, 74⁰09'07" W)

Delavan Ave., Newark Bypass (40°46'11" N, 74°09'29" W)

KLL006264

1031 Passaic River

1032 Passaic River

7033 Rassaic River

#034 Passaic River

#035 Passaic River

#036 Passaic River

#037 Passaic River

#038 Passaic River

#039 Passaic River

#040 Passaic River

#041 Passaic River

#042 Passaic River

#043 Passaic River Third Ave., Newark Bypass (40°45'28" N. 74°09'55" W)

Fourth Ave., Newark Bypass (40 45 22 N, 74 09 86 W)

Clay Street, Newark*Bypass (40045'03" N, 74009'58" W)

Orange Street, Newark Bypass (40°44'47" N, 74°10'01" W)

Bridge Street, Newark Bypass (40 $^{\circ}44'41"$ N, $74^{\circ}10'$ 00" W)

Rector Street, Newark Bypass (40°44'29" N, 74°09'56" W)

Saybrook Place, Newark Bypass (40°44'26" N, 74°09'44" W),

City Dock, Newark Bypass (40⁰44'07" N, 74⁰09'44" N)

Jackson Street, Newark Bypass (40°43'59" N, 74°09'19" W)

Polk Street, Newark Bypass (40°43'59" N, 74°09'14" W)

Freeman Street, Newark Bypass (40°44'02" N, 74°08'46" W)

Curtis Pl., Paterson Overflow (40°55'11" N, 74°10'34" W)

Mulberry St., Paterson Overflow (40°55'12" N, 74°10'33" N)

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1046 Passaic River

#047 Passatc River

#048 Passaic River

#049 Passaic River

#050 Passaic River

#051 Passaic River

#052 Passaic River

#053 Passaic River

#054 Passaic River

#055 Passaic River West Broadway, Paterson Overflow (40°55'14" N. 74°10'31" N)

Bank St., Paterson Overflow (40°55'18" N. 74°10'27" N)

Bridge St., Paterson Overflow (40955'23" N. 74010'14" W)

Montgomery St., Paterson Overflow (40°55'29" N, 74°10'03" W)

Straight St., Paterson Overflow $(40^{\circ}55'33'' \text{ N, } 74^{\circ}09'59'' \text{ W})$

Franklin St., Paterson Overflow (40°55'36" N, 74°09'57" W)

Keepe St., Paterson Overflow (40°55'37" N, 74°09'56" W)

Warren St., Paterson Overflow (40°55'40" N, 74°09'55" W)

Sixth Avenue, Paterson Overflow (40°56'03" N, 74°10'01" W)

East 5th St.and Fifth Ave., Paterson Overflow $(40^{\circ}56'11" \text{ N, } 74^{\circ}09'48" \text{ W})$

East 11th St., Paterson Overflow (40°56'13" N, 74°09'26" W)

Fourth Ave., Paterson Overflow (40°56'14" N, 74°09'22" W)

KLL006266

#056 Passaic River

1057 Passaic River

#058 Passaic River

7059 Rassaic River

#060 Passaic River

#061 Passaic River

#062 Passaic River

#063 Passaic River

#064 Passaic River

#065° Passaic River

#066 Passaic River

#067 Passaic River

#068 Passaic River 5.U.M. Park, Paterson Overflow (40°55'05" N, 74°10'46" W)

Horth Heat St., Paterson Overflows (40%55177 N. 74010 33" N)

Arch Street, Paterson Overflow (40055'24" N, 74010'114" W)

Jefferson St., Paterson Overflow (40°55'26" N. 74°10'11" W)

Stout St., Paterson Overflow (40°55'29" N, 74°10'09" W)

North Straight St., Paterson Overflow (40°55'35" N, 74°10'00" W)

Bergen St., Paterson Overflow (40055'44" N. 74009'57" W)

Short St., Paterson Overflow (40°55'53" N. 74°10'05" W)

Second Ave., Paterson Overflow (40056'18" N, 74008'35" W)

Third Ave., Paterson Overflow (40°56'10" N, 74°08'30" N)

33 Street and Tenth Ave., Paterson Overflow (40°55'25" N, 74°08'28" W)

20th Ave., Paterson Overflow (40°54'21" N, 74°07'59" W)

Market Street, Paterson Overflow (40°54'08" N, 74°08'C5" W)

KLL006267

1069 Passaic

1070 Passaic River

4071 Passaic River

#072 Passaic River

#073 Passaic River

#074 Passaic River

Addendum

#030 Passaic River Passaic Tail Race, Passaic Bypass (4005) 127% N. 74007113" W)

Dundee Island Lateral, Rassaic Overflow (40051 52" N, 74006 40" W)

Noodward Ave., Rutherford Overflow (40049'52" N, 74⁰07'15" W)

Pierrepont Ave., Rutherford Overflow (40°49'40" N, 74°07'18" W)

Rutherford Ave., Rutherford Overflow (40°49'20" N, 74°07'25" W)

Second River Joint Meeting, Neward Bypass (40°46'36" N, 74°09'05" W)

Herbert Place, New ark Bypass (40°45'55" N, 74°09'35" W)

C-2. SCHEDULE OF COMPLIANCE FOR INDUSTRIAL DISCHARGE INFORMATION

It is apparent that other pollutants attributable to inputs from major contributing industries using the municipal system are also present, in the facility's discharge. At such time as sufficient information becomes available to establish limitations for such pollutants, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with best practicable industrial technology requirements or water quality standards.

A. Not later than August 31, 1975 , the permittee shall initiate whatever actions are needed to enable the permittee to enforce all pre-treatment requirements necessary to insure compliance with the terms and conditions of this permit as well as to insure compliance by all major contributing industries with the pre-treatment standards and any other applicable regulations promulgated pursuant to Sections 307 and 308 of the Act.

By August 31, 1975, the permittee shall notify the Regional Administrator and State Agency of the actions it intends to take to comply with the above requirement.

The permittee shall require each major contributing industry to submit to the permittee periodic notice (at intervals not to exceed 9 months) regarding specific actions taken to achieve full compliance with the requirements of Section 307. On the last day of the months of March and September, the permittee shall submit to the permit issuing authority a report summarizing the progress of all known major contributing industries subject to the requirements of Section 307 towards achieving full compliance with such requirements. Such reports shall include, at least, the following information:

- (1) A narrative summary of actions taken by the permittee to develop, promulgate, and enforce its own industrial waste regulations, as well as its own legislation and thereby ensure that all major contributing industries comply with the requirements of Section 307.
- (2) The number of major contributing industries using the treatment works, divided into SIC group categories.
- (3) The number of major contributing industries known to be in full compliance with the requirements of Section 307, or not subject to these requirements; e.g., discharge only compatible pollutants.

(4) A list identifying by name those major contributing industries known to be presently in violation of the requirements of Section 307.

These semi-annual reports must be filed with the permitting authority by March 31 and September 30 of each year until compliance is achieved. Submission would be required again only if a major contributing industry reverts to violating the requirements of Section 307.

B. Immediately upon issuance of this permit, the permittee shall establish and implement a procedure to obtain from all major contributing industries specific information on the quality and quantity of effluents introduced by such industrial users. The following information shall be reported to the permitting agency on a semi-annual basis beginning March 31, 1975; semi-annual reports reflecting no change from the previous reporting period may simply relate this fact without submitting repetitive data. These reports should follow the format outlined in the Appendix to this compliance schedule. All required data must be submitted before March 31, 1976.

It shall be the responsibility of the Permittee to compute and include in the semi-annual reports the "best practicable" effluent limitations and to determine and implement necessary pre-treatment requirements (as provided for in 40 CFR Part 128) for the major contributing industries. In computing the allowable industrial inputs, the permittee shall utilize the applicable industrial effluent guidelines as published in the Federal Register.* In the first semi-annual report (due March 31, 1975), the permittee shall propose a schedule for determining the required pre-treatment information and, after approval by the permitting authority, shall implement the schedule. After receipt of the pre-treatment data, this permit may be amended to reflect the PVSC'S effluent requirements for incompatible pollutants.

NOTE: A major contributing industry is one that: (a) has a flow of 50,000 gallons or more per average workday; (b) has a flow greater than 5% of the flow carried by the municipal system receiving the waste; (c) has in its waste a toxic pollutant in toxic amounts as defined in standards issued under Section 307 (a) of the Act; or (d) has significant impact, either singly or in combination with other contributing industries, on the treatment works or the quality of its effluent.

*If the permittee is unable to compute effluent limitations for any industrial source category, the permittee shall so notify the permit issuing authority. After such notification, the permit issuing authority will either assume the responsibility for such calculations or will assist the permittee in computing effluent limitations for that industrial source category.

APPENDIX TO INDUSTRIAL COMPLIANCE SCHEDULE

To comply with the industrial discharge reporting requirements outlined above, the following procedure should be utilized for each major contributing industry:

Using the following format, a description of each major contributing industry discharging to the municipal system should be prepared. A separate set of six questions should be completed for each major industrial user.

See "Section IV" of "Standard Form A" (attached).

It is the responsibility of the permittee to obtain the required information for all major industrial contributors to his facility, including those contributing via another system. Actual data should be provided, if available; otherwise the best estimate should be provided and the response marked "interim." If certain of the requested information does not apply, it should be marked "N.A."

Specific instructions follow: (Question numbers refer to those on the sheet entitled "Standard Form A - Municipal".)

- QUESTION 1 MAJOR CONTRIBUTING FACILITY: Give the name and address that designates the location of the industrial facility.
- QUESTION 2 PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE: Using four-digit standard industrial classification (SIC) codes, indicate the type of industrial facility that is discharging into the municipal system.

 Standard industrial classification (SIC) code numbers and descriptions may be found in the 1972 edition of the "Standard Industrial Classification Manual" prepared by the Executive Office of the President, Office of Management and Budget, which is available from the Government Printing Office, Washington, D. C. Do not use previous editions of the manual. Copies are also available for examination at State water pollution control offices, Regional Offices of the U.S. Environmental Protection Agency, and at most public libraries.
- QUESTION 3 PRINCIPAL PRODUCT OR RAW MATERIAL: Specify either the principal product or the principal raw material and the maximum quantity per day produced or consumed. Quantities are to be reported in the units of measurement given in Table B for particular SIC cate-

gories. Enter the letter-number code from the "Code" column in Table B for the units selected under "Units." For SIC categories not listed, use the units of measurements normally used by that industry.

QUESTION 6:

Indicate the characteristics of the wastewater from the contributing industry in terms of parameters that will adequately identify the waste, such as BOD, COD, Cr, Zn, pH units, degrees Fahrenheit, etc. The characteristics should be indicative of the waste stream after any pre-treatment is provided by the industrial facility but prior to entering the municipal system.

In addition to parameter names, report values in units specified in Table A. The first column, "Parameter & Units," indicates the preferred units for reporting data for a given parameter. The second column, "Method," lists the preferred analytical method, if any, for determining the required parameter values. The next three columns, "References," give the page numbers in standard reference works where a detailed description of the recommended analytical technique given under "Method" can be found. These standard references are:

- 1. STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATERS, 13th edition, 1971, American Public Health Association, New York, New York 10019.
- 2. A.S.T.M. STANDARDS, PART 23, WATER; AT-MOSPHERIC ANALYSIS, 1972, American Society for Testing and Materials, Philadelphia, Pa. 19103.
- 3. EPA METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, April 1971, Environmental Protection Agency, Water Quality Office, Analytical Quality Control Laboratory, 1014 Broadway, Cincinnati, Ohio 45202.

Copies of these publications are available from the above sources, or for review in the Regional Offices of the U.S. Environmental Protection Agency or the State Water Control Board.

The last column, "Data Reporting Level," indicates that nearest significant figure (digit) to which the data must be reported. For example, the figure X for chloride indicates that chloride data must be reported to the nearest whole milligram per liter. This level should not be confused with "detectable limits"; applicable identication limit information can be obtained from the appropriate reference source.

Additional information obtained through the permittee's "Waste Effluent Survey" description shall be submitted for each major industry. Such additional information should include:

- (1) A brief description of industrial operations.
- (2) The quantity of water used by the industry for the preceding year, classified according to source; i.e., purchased water, well water, river water.
- (3) A description of the date and timespan of samples reported in answer to Question number 6 of "Section IV."
- (4) A description of the industry's flow variation, including hours of discharge and maximum, minimum and average flow rates.

Attachment

NJ0021016

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STANDARD FORM A-MUNICIPAL

SECTION IV. INDUSTRIAL WASTE CONTRIBUTION TO MUNICIPAL SYSTEM Page

of

Submit a description of each major industrial facility discharging to the municipal system, using a separate Section IV for each facility discripation. Indicate the 6 digit Standard industrial Classification (SIC) Code for the industry, the major product or raw material, the flow (in those same gallers are day), and the characteristics of the wastewater discharged from the industrial facility into the municipal system. Commit facility for placement of products as raw majorists, (see instructions).

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|---|--------|--------------------------------------|--------------------|
| | 4014 | #. * 1999 A. #1 | |
| Number& Street | 4011 | | |
| Gly | 4010 | | |
| County | 4910 | | |
| State | 4010 | | |
| 23p Code | 4011 | | |
| 8 Frimary Standard Industrial Classification Code (see Instructions) | 402 | | |
| S. Principal Product or Raw Material (see instructions) | | | Quantity Units (Se |
| Product | 4032 _ | | 4000 |
| Raw Material | 4035 | | - 403# 403# |
| | - | | Section 1 |
| Flow Indicate the volume of water discharged into the municipal system in thousand gallons per day | 4040 | thousand gallons per day | |
| and whether this discharge is inter- mittent or continuous. | 4046 | intermittent (int) [Continuous(con) | |
| : Pretrestment Previded - Indicate if gretreatment is provided prior to entering the municipal system | 405 | /œ | |
| Characteristics of Westewater (100 Instructions) | | | |
| Parameter Name Parameter | · | | |
| AGED Value | | | |

C-3. SEWER SYSTEM EVALUATION AND REHABILITATION COMPLIANCE SCHEDULE

- A. The permittee has, in accordance with 40 CFR 35.927, initiated a Sewer System Evaluation and Rehabilitation Program. The permittee shall, by August 31, 1976, submit to both the Regional Administrator and the NJDEP the results of Phase I (Infiltration/Inflow Analysis) of this program.
- B. If it is determined by the results obtained from the Infiltration/
 Inflow Analysis that the Sewer System Evaluation and Rehabilitation
 Program is to continue, the permittee shall, within one month of
 approval of the Analysis (Phase I) Report by the USEPA and the
 NJDEP, submit a program for Phase II (Field Investigation and
 Survey), together with a proposed Engineering Contract for said
 work and an application for a Federal grant for this work. Within
 two months of approval by the USEPA of this program, contract
 and a grant, the permittee shall execute the contract and start
 Phase II of the program.
- C. Upon completion by the permittee of Phase II of the Sewer System Evaluation and Rehabilitation Program and after approval by the Regional Administrator and the NJDEP of the results of Phase II, this permit may be revised to incorporate a compliance schedule for construction or rehabilitation (Phase III) recommended by Phase II.

C-4. WET WEATHER FLOW STUDY COMPLIANCE SCHEDULE

A. Operation of Systems with Combined Sewers

i. General Requirements

- 1. The permittee shall operate the treatment works, including the treatment plant and total sewer system, to minimize discharge of the pollutants listed in the permit from combined sewer overflows or bypasses.
- 2. No new sources of stormwater inflow shall be connected to any separate sanitary sewers in the sewer system.

ii. Preliminary Requirements

1. Report on Maximum Treatable Flow Rates

The permittee must report to the Regional Administrator and the State agency by August 31, 1975, the maximum treatable flow rates for the treatment plant or any complete unit process. The maximum treatable flow rates must be at least equal to one of the following:

- a. The maximum hydraulic flow rate for which the treatment plant was designed, or the maximum hydraulic flow rate for which the treatment plant can provide partial treatment.
- b. The maximum flow rate that can be delivered to the plant without causing seriously adverse conditions, such as substantial property damage, in the interceptor and lateral sewer system.

The permittee shall operate the system so as to achieve the maximum treatable flow.

2. In lieu of the above, The permittee may submit a detailed operational plan designed to minimize pollutant discharges from the treatment and sewer system. The permittee must demonstrate that, if implemented, the plan would provide for a lower discharge of pollutants from the system during wet weather than that occurring if the hydraulic flow were treated during wet weather at the limiting flow rate in B.1. above. The treatment plant and sewer system shall be operated in accordance with this plan.

3. The permittee shall also report by February 28, 1977, to the permit issuance authority a proposed method for estimating the number and location of new sewer connections which will be served by combined sewers for the duration of the permit. The permittee shall also report by February 28, 1979, a proposed method for estimating the impact of the additional flows generated by these new sewer connections on the volume of discharges from the combined sewer system. This method shall be used in the development of the operational plan required in Section iii, below.

iii. Operational Plan

An interim operational plan designed to minimize the discharge of pollutants from combined sewer overflows and bypasses must be submitted by the permittee to the Regional Administrator and the State Agency by June 30, 1976. The plan will provide for optimal coordinated operation of the sewage treatment plant and contributing sewer systems. The plan will specifically:

- 1. Refine the estimate of maximum treatable flow.
- 2. If applicable, report the number, location, types, and kinds of regulators and their respective operating history, maintenance program, and performance efficiency.
- Report the calculated or estimated storage capacities of the sewer system upstream from all control devices such as pump stations and regulators, or combined sewer discharges.
- 4. Provide operational procedures for utilizing at least 80% of the available capacity of interceptors and trunk lines upstream of any control devices such as pump stations, or regulators prior to any discharge from a combined sewer overflow or bypass; or provide, if such storage capacity utilization cannot be achieved with existing control devices, the operational procedures for maximizing the use of storage prior to any combined sewer discharge.
- 5. Provide a method to determine if the upstream storage capacity was utilized prior to any discharge from the combined sewer system.

3. The permittee shall also report by February 28 1976, to the permit issuance authority a proposed method for estimating the number and location of new sewer connections which will be served by combined sewers for the duration of the permit, and a proposed method for estimating the impact of the additional flows generated by these new sewer connections on the volume of discharges from the combined sewer system. This method shall be used in the development of the operational plan required in Section 111, below.

lii. Operational Plan

An interim operational plan designed to minimize the discharge of pollutants from combined sewer overflows and bypasses must be submitted by the permittee to the Regional Administrator and the State agency by June 30, 1976.

The plan will provide for optimal coordinated operation of the sewage treatment plant and contributing sewer systems. The plan will specifically:

- 1. Refine the estimate of maximum treatable flow.
- 2. If applicable, report the number, location, types, and kinds of regulators and their respective operating history, maintenance program, and performance efficiency.
- 3. Report the calculated or estimated storage capacities of the sewer system upstream from all control devices such as pump stations and regulators, or combined sewer discharges.
- 4. Provide operational procedures for utilizing at least 80% of the available capacity of interceptors and trunk lines upstream of any control devices such as pump stations, or regulators prior to any discharge from a combined sewer overflow or bypass; or provide, if such storage capacity utilization cannot be achieved with existing control devices, the operational procedures for maximizing the use of storage prior to any combined sewer discharge.
- 5. Provide a method to determine if the upstream storage capacity was utilized prior to any discharge from the combined sewer system.

6. Analyze the effect on the total volume of combined sewer discharges of new sewer connections anticipated for the duration of the permit. If these additional connections are expected to increase the total volume of discharges for like meteorological conditions, the plan must provide a method for the prevention of this increase by regulation or control of new connections and/or an offsetting of any added flows by such means as sewage and inflow reduction, in system flow routing, and treatment and enlargement of sewer and treatment capacity.

B. Monitoring of Systems with Combined Sewers

i. General Requirements

Point sources so noted in Section C-1, are overflows resulting when the hydraulic flow capacity of the system has been exceeded.

These discharge points may be utilized for wet weather overflows or bypasses to the extent specified by the approved preliminary report and interim operational plan. For all overflows the permittee is required to take the following actions:

In conjunction with the permittee's Infiltration/Inflow Analysis the permittee shall take measurements at overflow stations and at bypass points to determine overflows due to both infiltration and inflow. Such overflows shall be related to rainfall wherever possible, and time-duration curves shall be developed to establish both peak rates and total quantity overflowed insofar as may be possible. Sampling of such overflows shall be undertaken to determine the quality of the bypassed storm water flows and its effect on the River. The results of such analyses shall be included in the report required August 31, 1976. (see Condition C-3(A) on Infiltration/Inflow Analysis).

ii. Reporting Results

Included in the report required above, or in a separate report to be submitted by June 30, 1977, the permittee shall make recommendations concerning the alternative plans for corrective action along with recommendations for alleviating and/or treating overflow discharges including estimates of cost for implementing the alternative plans. The alternative strategies to be evaluated shall include, as a minimum:

a. dual use treatment facilities:

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- h. storing and/or treating initial or final sewer system.
- storage and subsequent treatment of discharges;
- improvements in the sewer exciem.

C-5 FACILITIES UPGRADING COMPLIANCE SCHEDULE

- A. The permittee shall, before August 1, 1976, complete and submit to both the Regional Administrator and the State Agency, a detailed design report and plans and specifications, together with a Step 3 Grant Application, for the Phase I* modifications to the treatment facilities. 3/ Within one year after approval by the USEPA and the NJSDEP of Phase I, the permittee shall submit a detailed design report and plans and specifications for Phase II* modifications to the treatment facilities. 3/
- 8. Construction grant project number C-34-369-02, contracts numbered 480, 481, 484, 485, 487, 494, 491, 496A and 496B, is expected to be certified to the USEPA by the NJSDEP in a short time. Upon being awarded the Federal grant, the PVSC must advertise for receipt of bids in a timely manner. The following schedule shall be followed: one or more contracts must be advertised for bids within three months after receipt of the Federal grant. All nine contracts must be advertised for bids within seven months after receipt of the Federal grant.

Upon receipt by the USEPA of additional MJSDEP certified construction grant applications for completion of the facility upgrading, this permit shall be revised to include the appropriate schedules for advertising the remaining contracts.

*Facilities upgrading to be accomplished in two major construction phases. Phase I involved construction of new secondary settling facilities, biological units, pumping stations, maintenance building, etc., and the major part of the sludge handling facilities. Phase II involves the demolition of existing primary settling facilities and the construction of new primary settling facilities and the remaining sludge handling facilities.

NOTES:

- If the time period allotted for the completion of an interim requirement specified above is greater than 9 months, then the permittee shall submit a report detailing its progress toward completion of the interim requirement at the end of the first 9-month period and at the end of each succeeding 9-month period (including, of course, the report, specified above, required within 14 days following the specified completion date).
- <u>2</u>/ Each notice of non-compliance shall include the following information:
 - A. a short description of the non-compliance;
 - B. a description of any actions taken or proposed to be taken by the permittee to comply with the elapsed schedule requirement without further delay;

C-5. FACILITIES UPGRADING COMPLIANCE SCHEDULE

- A. The permittee shall, before february 28, 1976.

 complete and submit to both the Regional Administrator and the State agency, a detailed design report and plans and specifications, together with a Step 3 Grant Application, for the Phase I* modifications to the treatment facilities. 3/ Within one year after approval by the USEPA and the NJDEP of Phase I, the permittee shall submit a detailed design report and plans and specifications for Phase II* modifications to the treatment facilities. 3/
- B. The permittee shall, within two months after receiving an offer of a grant from USEPA and approval from both the Regional Administrator and the State agency of the documents required above, advertise for the receipt of bids in accordance with the detailed schedule submitted with the Step 2 grant application, approved by the USEPA. Within one month after approval by USEPA and NJDEP of bids received, the permittee shall award the construction contracts for the approved work.
- *Facilities upgrading to be accomplished in two major construction phases. Phase I involved construction of new secondary settling facilities, biological units, pumping stations, maintenance building, etc., and the major part of the sludge handling facilities. Phase II involves the demolition of existing primary settling facilities and the construction of new primary settling facilities and the remaining sludge handling facilities.

NOTES:

- If the time period allotted for the completion of an interim requirement specified above is greater than 9 months, then the permittee shall submit a report detailing its progress toward completion of the interim requirement at the end of the first 9-month period and at the end of each succeeding 9-month period (including, of course, the report, specified above, required within 14 days following the specified completion date).
- Each notice of non-compliance shall include the following information:
 - A. a short description . the non-compliance;
 - B. a description of any actions taken or proposed to be taken by the permittee to comply with the elapsed schedule requirement without further delay;

Page 32 of 33 pages NJ0021016

- C. a description of any factors which tend to explain or mitigate the non-partitioner and
- D. An estimate of the data parmittee will comply with the elapsed concerns sentential and as assessment of the people flity. State acquirement on time.
- 2/ A is renogative that sufficient fissibility must be maintained so that modifications to design parameters, necessitated by the results of the sewer system evaluation and wet weather study, may be made.

Page 33 of 33 pages NJ0021016

This permit shall become effective on February 28, 1975.

This permit and the authorization to discharge shall be binding upon the permittee and any successors in interest of the permittee and shall expire on June 30, 1977. The permittee shall not discharge after the spore date of expiration. In order to receive authorization to discharge bayond the above date of expiration, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue NPDES permits no later than December 31, 1976.

By authority of

Gerald M. Hansler, P. E.

(Regional Administrator)

Date

Weyer Scolnick, Director

Enforcement and Regional Counsel Division

ANNUAL REPORT

by

Chief Engineer

S. A. LUBETKIN

to the

PASSAIC VALLEY

SEWERAGE COMMISSIONERS

FOR OPERATIONS DURING
THE YEAR

1976

SPECIAL REPORT #4 (FROM AUGUST-SEPTEMBER 1976)

PVSC REGULATIONS AND A MODEL SEWER ORDINANCE FOR MUNICIPALITIES DISCHARGING INTO THE PVSC SYSTEM

As everyone knows, the treatment facilities of the PVSC must be updated to comply with the Federal standards established under P.L. 92-500. Over the last several years the Commissioners have taken the necessary action which will result in the construction of new secondary treatment facilities.

The costs for such facilities are very great. Our estimates are in the area of \$500,000,000. On those portions of the construction plan which have already been approved, we have been fortunate to obtain commitments of 75% Federal funding. However the Federal funds which are available are subject to grant conditions and included in the grant conditions is the Federal requirement, as a prerequisite to our receiving the Federal funds, that sewer use ordinances must be adopted by all of the municipalities serviced by the PVSC's treatment plant.

Apart from the requirements of the grant conditions, under the provisions of the Federal Water Pollution Control Act of 1972, a new system of discharge permits was initiated. In order to continue the PVSC discharge into New York Harbor, PVSC must comply with the terms of the discharge permit issued by the Federal Government. Included in the conditions of the PVSC discharge permit (NJ0021016) is the requirement for the adoption of sewer use ordinances. It is to be noted that the Federal statute provides that any violation of a discharge permit condition constitutes a civil and criminal offense.

At their board meeting of April 8, 1976, the Passaic Valley Sewerage Commissioners adopted the "Rules and Regulations of the PVSC Concerning Sewer Connection Permits". On April 12, 1976 copies of the Rules and Regulations were sent to each user municipality along with a letter of explanation.

Although the PVSC had, in the past, conducted several conferences with its user municipalities to keep them apprised of the Federal Regulations, another one was held on May 20, 1976 wherein the PVSC, Federal and State regulations were reviewed and they were notified that PVSC would have its staff prepare a model ordinance to assist the municipalities in conforming with PVSC regulations.

We prepared such an ordinance, which incorporated all of the requirements of the United States Environmental Protection Agency as well as the New Jersey Department of Environmental Protection, and submitted it to the United States Environmental Protection Agency as well as to the New Jersey Department of Environmental Protection, which in turn, have commented upon and finally approved it.

Since, not only is PVSC required to make periodic reports to the USEPA of non-compliance with permit conditions, but the flow of Federal Funding for the PVSC project would be interrupted by non-compliance with the grant conditions, PVSC requested that we be informed within 30 days of the name of the individual within each municipality that would act, as liaison between that municipality and the PVSC and further, a timetable concerning the adoption of the ordinance.

This, of course, is important since any interruption in the Federal flow of such a large amount of money would require the PVSC to impose the costs directly upon the municipalities, since the PVSC would have construction contracts, which must be paid.

This proposed ordinance, reproduced on the following pages, which works in conjunction with PVSC Rules and Regulations Concerning Sewer Connection Permits (also included for reference), was sent to each user municipality on September 29, 1976 for the purpose of having the ordinance introduced and adopted by e dilika erika da saka periora periora beraran da saka beraran da saka beraran beraran da saka beraran beraran Baran 1965 - Maria Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran B chem.

It is to be noted that as of December 31, 1976, fifteen of the thirty participating municipalities responded to PVSC indicating the ordinance would be passed. PVSC will follow up on the remaining municipalities for compliance during 1977.

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PROPOSED MODEL ORDINANCE FOR MUNICIPALITIES

AN ORDINANCE REGULATING THE USE OF SEWERS AND THE DISPOSAL OF WASTE WATER AND PROVIDING PENALTIES FOR THE VIOLATION THEREOF.

BE IT ORDAINED by the County, as follows:

οf

of

- 1. Whenever used in the within ordinance, the following terms shall have the following meaning:
 - a. "Flotable oil" is oil, fat or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. A wastewater shall be considered free of flotable fat if it is properly pretreated and the wastewater does not interfere with the collection system.
 - b. "Industrial wastes" shall mean the wastewater from industrial processes, trade, or business as distinct from domestic or sanitary wastes.
 - c. "Industrial Cost Recovery". A charge to industrial users based on its use of PVSC facilities to repay the capital cost outlay of the Federal Share given PVSC under the provisions of applicable Federal law allocable to the treatment of the wastes from the industrial user.
 - d. "Industrial User", Any non-governmental user of PVSC facilities identified in the Standard Industrial Classification Manual 1972 as amended and supplemented under Divisions A,B,D,E or I. A user may be excluded if it is determined that it introduces primarily segregated sanitary wastes.
 - e. "Industrial Waste". The liquid waste from an industrial process, as distinct from sanitary waste. All wastes, except storm waters and sanitary wastes.
 - f. "Major Industry". An industrial user of PVSC facilities that: (a) has a flow of 50,000 gallons or more per average work day; (b) has in its waste, a toxic pollutant in toxic amounts; or, (c) is found by USEPA, NJDEP or PVSC to have significant impact, either singly or in combination with other contributing industries, in the PVSC treatment works or upon the quality of the effluent from the PVSC treatment works.
 - g. "Natural outlet" shall mean an outlet, including storm sewers and combined sewer overflows, into a watercourse, pond, ditch, lake or other body of surface or groundwater including the Passaic River or any of its tributaries.

- h. "NJDEP" New Jersey Department of Environmental Protection.
- i. "NPDES" National Pollution Discharge Elimination System.
- j. "Person" shall mean any individual, firm, company, society, association, corporation (public or private) or group.
- k. "pH". The reciprocal of the logarithm of the hydrogen ion concentration. The concentration is the weight of hydrogen ions, in grams, per liter of solution. Neutral water has a pH value of 7 (a hydrogen concentration of 10). Lower pH's are acid, higher pH's are alkaline.
- "Pretreatment". Treatment given to industrial waste, prior to its discharge, directly or indirectly, to the PVSC facilities, by the industry, in order to remove illegal and/or undesirable constituents or to reduce the strength of the waste.
- m. "PVSC" Passaic Valley Sewerage Commissioners
- n. "Public Sewer" shall mean a common sewer controlled by a governmental agency, public utility, or the municipality.
- o. "Sanitary Sewer", shall mean a sewer that carries liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions together with minor quantities of ground, storm and surface waters that are not admitted intentionally.
- p. "Sanitary Waste". Waste derived principally from dwellings, office buildings, and sanitary conveniences, When Segregated from industrial wastes, may come from industrial plants or commercial enterprises.
- q. "Sewage" is the spent water of a community. The preferred term is "wastewater.
- r. "Sewer" shall mean a pipe or conduit that carries waste water or drainage water.
- s. "Slug" shall mean any discharge of water or wastewater which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.
- t. "Storm drain" (sometimes called "storm sewer") shall mean a drain or sewer for conveying water, groundwater, subsurface water, or unpolluted water from any source.

- u. "Strength of Waste". A measurement of suspended solids, and/or Biochemical Oxygen Demand and/or Chemical Oxygen Demand, and/or any other parameter determined by PVSC as a fair indicator of the relative use, other than volumetric, of PVSC facilities by industrial wastes.
- v. "Suspended Solids" shall mean total suspended matter that either floats on the surface of, of is in suspension in, water, wastewater, or other liquids and that us removable by laboratory filtering as prescribed in "Standard Methods for the Examination of Water and Wastewater" and referred to as nonfilterable residue.
 - w. "Toxic Wastes in Toxic Amounts" shall be defined by USEPA in 40 CFR 129 (38 F.R. 24342, 9-7-73) and any superceding revisions.
- x. "USEPA" United States Environmental Protection Agency
- y. "Unpolluted water" is water of quality equal to or better than the effluent criteria in effect or water that would not cause violation of receiving water quality standards and would not be benefited by discharge to the sanitary sewers and wastewater treatment facilities provided.
- z. "User Charge". A charge to users consisting of two parts. The first part established by PVSC based on volume and, where applicable, on strength and/or flow rate to pay for the use of the PVSC facilities. The second part established by the municipality to pay for the use of the local sewer system and to pay for administrative of the billing and collection of the funds.
- aa. "Wastewater" shall mean the spent water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions, together with any groundwater, surface water, and storm water that may be present.
- bb. "Wastewater Facilities" shall mean the structures, equipment, and processes required to collect, carry away, and treat domestic and industrial wastes and dispose of the effluent.
- cc. "Wastewater treatment works" shall mean the PVSC facilities.

- 2. It shall be unlawful to discharge into any natural outlet within the municipality any wastewater or other polluted waters, except where suitable treatment has been provided and where a National Pollution Discharge Elimination System permit has been obtained from the appropriate governmental authority, where required.
- 3. No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a permit from the appropriate municipal official.
- 4. Application for sanitary connections for dwellings, groups of dwellings or industrial or commercial establishments with only sanitary waste, shall be made directly to the municipality. A fee shall be paid to the municipality to process the application as otherwise provided by ordinances of the municipality. The governing body of the municipality shall designate some suitable person to maintain a record of the number of sanitary applications and connections that are added and removed from the system and shall make an annual report to the Passaic Valley Sewerage Commissioners no later than February 1 of each year. When a direct connection to a PVSC sewer is requested by the applicant, the request shall first be endorsed with the approval of the governing body of the municipality and then submitted to the PVSC for their action.
- 5. Each existing industrial user which is presently connected directly or indirectly to the wastewater facilities of the municipality shall make application for a permit no later than 1977, whether the connection be for industrial waste or storm water. Applications for future connections must be made and approved before a certificate of occupancy may be issued. The application shall be made to the municipality by the industry that generates the waste, however, the application must be signed by the owner of the property whereon the industry is located. After approval of the application by the municipality, the application shall be forwarded to PVSC for classification and issuance of the permit by PVSC.

Any existing industrial user which proposes to make any change in its facility or its processing, which significantly affects the quality or the quantity of its discharge into the system, shall submit to the municipality an Industrial Sewer Waste Revision Application showing the contemplated changes. Any new tenant or occupant of an existing industrial user shall submit an Industrial Sewer Waste Revision Application. The application, if approved by the municipality, shall be sent to the PVSC, accompanied by the written approval of the municipality. Existing industrial users that have applied for permits may continue their discharge until their application has been processed by PVSC, except for any dischanges which constitute prohibited waste as otherwise provided in the within ordinance or unless notified by PVSC to cease and desist their discharge. No certificate of occupancy shall be issued for an industrial use until an industrial permit has been issued by the PVSC and no person shall occupy any building or structure for the purpose of a new industrial use until an industrial permit has been issued by the PVSC.

Industrial users shall be classified by PVSC as follows:

Category I:

Class I-A permit shall not be issued to an industry defined as a major industry and when issued shall allow the industry to discharge with no modification or pretreatment of flow.

Class I-B permit is one issued to an industry classified as a major industry. This permit shall allow the industry to discharge with no modifications or pretreatment of flow, however, PVSC may require the installation of monitoring equipment.

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The section of the se Class II-A permit shall allow an industry to discharge pretreated wastes in accordance with standards established in the of the second of permit.

Class II-B permit shall allow an industry to continue to discharge, subject to change of characteristics of its waste by pretreatment or other means in accordance with a schedule as established by the PVSC in the permit.

Category III: The permit is denied and the discharge of prohibited materials must be halted or modified by a date established by the PVSC and in accordance with conditions contained in the permit and the second to the state of the second se

- 7. The PVSC classification of an application is subject to change by PVSC upon written notification from PVSC to the applicant by certified mail. Any change shall be accompanied by a detailed explanation of the reason for the change.
- Any industry aggrieved by a permit classification by the PVSC shall have a right to appeal to the PVSC. Such an administrative appeal shall be taken within thirty (30) days of notification by PVSCto the industry of its decision. The notice of appeal shall be delivered personally to the offices of PVSC at 600 Wilson Avenue, Newark, New Jersey or shall be sent by certified mail, return receipt requested. The taking of an appeal shall not stay the provisions of a Class III denial. During the time of appeal, however, the Class II permits shall be stayed, however, the staying shall not release any industry from meeting any requirements of any schedule set by the New Jersey Department of Environmental Protection or the United States Environmental Protection Agency.

- 9. Upon the filing of an appeal the PVSC shall set the date and time for a hearing before the Commissioners. The applicant shall have the right to present evidence, shall have the right to be represented by counsel and shall have the right of cross examination. Upon the conclusion of the hearing, the Commissioners shall make findings of fact and conclusions.
- 10. All applications for industrial permits shall be submitted on forms to be supplied by PVSC and shall comply with the instructions on said form.
- ll. All costs and expenses incidental to the installation and connection of the building sewer shall be borne by the applicant, and the applicant shall indemnify the municipality or PVSC from any loss or damage that may be occasioned by the installation of the building sewer. All sewer connections shall be in accordance with the requirements of the municipality as otherwise provided by ordinance. In the case of the connection into PVSC sewer the connection shall be in accordance with the conditions contained in the approval of the PVSC.
- 12. No person shall make connection on roof downspouts, foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or drain, which in turn is connected directly or indirectly to a public sanitary sewer aless approved by the municipality for purpose of disposal of olluted surface drainage.
- 13. In addition to the application for the permit as hereinabove provided, each industrial user must complete an industrial survey form which will be supplied by PVSC and, from time to time, shall update the form when required by the PVSC.
- 14. Whenever an industry is classified as a major industry, it shall install an approved, sealed, automatic monitoring system if required by PVSC.
- 15. No uncontaminated water shall be discharged into the PVSC system except with the prior written consent of the municipality (and PVSC). (There will be two separate provisions, one for municipalities with separate systems and one for municipalities with combined systems.)
- 16. When pretreatment standards are adopted by the United States Environmental Protection Agency for any given class of industries, then any industry within that class must conform to the United States Environmental Protection Agency timetable for adherence to pretreatment requirements as well as all other applicable requirements promulgated by the United States Environmental Protection Agency in accordance with the provisions of the law. Additionally, such industries shall comply with such more stringent standards 'cessitated by local conditions as determined from time to time by e PVSC.

- 17. All industrial users shall provide immediate access to its facilities at any time during normal working hours or at any other time that there is a discharge into the PVSC system or into any waters under the jurisdiction of the PVSC. Access shall be for the purpose of checking the quality of the discharge, taking samples and making tests of the discharge or for the purpose of permitting enforcement of the within ordinance. The access shall be made available to the employees of PVSC, New Jersey Department of Environmental Protection, United States Environmental Agency and/or the municipality. All users shall provide access to property and premises for inspection for the purpose of determining if there is any violation of the terms or provisions of the within ordinance.
- 18. The following wastes are prohibited and may never be discharged into waste water facilities of the municipality and PVSC:
 - a. Wastes that may create a fire or explosion hazard in the sewer or wastewater facility, such as gasoline, fuel oil, cleaning solvents, etc.

ALBERT GARAGE

- b. Wastes that may impair or cause to impair the hydraulic capacity of the sewer system, such as ashes, sand, metal, precipitates, etc.
- c. Wastes that may create a hazard to people, the sewer system, the treatment process, or the receiving water, such as dangerous levels of toxic materials.
- d. Wastes at a flow rate which is excessive over a relatively short time period so that there is a treatment process upset and substantial loss of treatment efficiency.

- e. Wastes below a pH of 5 unless the line is designed to accommodate such waste.
- f. Any discharge of radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by PVSC in compliance with applicable State or Federal Regulations.
- 19. The following wastes may not be discharged without special permission from the PVSC, upon a determination by the PVSC that the discharge would not be detrimental to the system:

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- a. Any discharge in excess of 150°F (65°C).
- b. Any discharge containing more than 100mg/l of mineral oil or grease.
- c. Any discharge containing floatable oil or grease.

- d. Any discharge of heavy metals, or any other toxic materials in toxic amounts, which amounts are to be established by PVSC.
- e. Any discharge quantities of flow or concentration which shall constitute a "slug".
- f. Wastes with pH outside the limits of 5.0 to 9.0.
- 20. Each major industrial user shall construct or otherwise have available a sampling point for sampling waste water before it enters the municipal sewer system. Other industrial users may be required to construct such sampling point, if ordered so to do by the municipality or the PVSC.
- 21. No discharge into the wastewater facilities of PVSC shall be permitted from any source which causes physical damage, interferes with the treatment process, or results in a violation of effluent limitations or other conditions contained in the National Pollution Discharge Elimination System Permit to Discharge issued to the PVSC by the United States Environmental Protection Agency.
- 22. When required by the municipality, USEPA, NJDEP or the PVSC, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable structure together with such necessary meters and other appurtenances to the building sewer to facilitate observation, sampling and measurenent of the wastes. Such structure, when required, shall be accessibly and safely located and shall be constructed in accordance with plans approved by the governmental agency requiring it. The structure shall be installed by the applicant at his expense and shall be maintained by him so as to be safe and accessible at all times.
- 23. All persons subject to the within ordinance shall be required to provide information to the municipality and PVSC as needed to determine compliance with the ordinance. These requirements may include:
 - Wastewaters discharge peak rate and volume over a specified time period.
 - 2. Chemical analyses of wastewaters.
 - Information on raw materials, processes, and products affecting wastewater volume and quality.
 - 4. Quantity and disposition of specific liquid, sludge, oil solvent or other materials important to sewer use control.
 - 5. A plot plan of sewers of the user's property showing sewer and pretreatment facility location.
 - 6. Details of wastewater pretreatment facilities.
 - 7. Details of systems to prevent and control the losses of materials through spills to the municipal sewer. KIICOSOSO

- 24. All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this ordinance shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association, or other method or procedure as may be approved by PVSC. Sampling methods, location, times, durations, and frequencies are to be determined on an individual basis subject to the approval of the municipality, and/or PVSC.
- 25. All users shall be required to comply with the requirement of user charges regulations and industrial costs recovery system regulations to be adopted by the PVSC in accordance with the requirements of the USEPA. The effective date for the implement of user costs regulations and industrial costs recovery system regulations shall be established by resolution of the PVSC. The effective date shall be certified by the PVSC and the said written certification shall be filed in the office of the municipal clerk.
- 26. No person shall intentionally, break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is part of the waste water facilities.
- 27. The governing body shall appoint or designate some suitable person to administer the within ordinance.
- 28. All users of the wastewater facilities shall comply with the requirements of the written rules and regulations of the PVSC which have been adopted and which from time to time shall have been adopted, which regulations shall become effective upon filing of certified copies in the office of the municipal clerk after the effective dates of the within ordinance.
- 29. Violations of any of the provisions of the within ordinance or any permit issued under the authority of the within ordinance may result in the termination of the permit and/or the termination of the authority to discharge into the system.
- 30. Any person violating any of the provisions of the within ordinance shall, upon conviction, be subject to a fine not to exceed five hundred dollars (\$500.00) and/or imprisonment not to exceed ninety (90) days, or both. Each and every day in which a violation of any provision of this ordinance exists shall constitute a separate violation.
- 31. If any portion of the within ordinance shall be declared to be unconstitutional, invalid or inoperable, in whole or in part, by a court of competent jurisdiction, the remaining portion not declared to be unconstitutional, invalid or inoperable, shall remain in full force and effect.

- 32. No ordinance heretofore adopted by the municipality shall be effected by the within ordinance except that if any provisions of any prior ordinance is in conflict with the provisions of the within ordinance, the provisions of the within ordinance shall control.
- 33. This ordinance shall take effect upon final passage and publication in accordance with the provisions of law.

RULES AND REGULATIONS OF THE PVSC CONCERNING SEWER CONNECTION PERMITS

1) DEFINITIONS

As used in this regulation, the following words and terms shall have the meaning set forth below:

Industrial Cost Recovery - A charge to industrial users based on its use of PVSC facilities to repay the capital cost outlay of the Federal Share given PVSC under P.L. 92-500 allocable to the treatment of the wastes from the industrial user.

Industrial User - Any non-governmental user of PVSC facilities identified in the Standard Industrial Classification Manual 1972 as amended and supplemented under Divisions A, B, D, E, or I. A user may be excluded if it is determined that it introduces primarily segregated sanitary wastes.

Industrial Waste - The liquid waste from an industrial process, as distinct from sanitary waste. All wastes, except storm waters and sanitary wastes.

Major Industry - An industrial user of PVSC facilities
that:

- (a) has a flow of 50,000 gallons or more per average work day;
- (b) has in its waste, a toxic pollutant in toxic amounts; or,
- (c) is found by USEPA, NJDEP or PVSC to have significant impact, either singly or in combination with other contributing industries, on the PVSC treatment works or upon the quality of the effluent from the PVSC treatment works.

Municipality - The municipality wherein an industry or other user discharging to PVSC facilities is located.

NJDEP - New Jersey Department of Environmental Protection

NPDES - National Pollution Discharge Elimination System

pH - The reciprocal of the logarithm of the hydrogen ion concentration. The concentration is the weight of hydrogen ions, in grams, per liter of solution. Neutral water has a pH value of 7 (a hydrogen ion concentration of 10^{-7}). Lower pH's are acid, higher pH's are alkaline.

<u>Pretreatment</u> - Treatment given to industrial waste, prior to its discharge to the PVSC facilities, by the industry, in order to remove illegal and/or undesirable constituents or to reduce the strength of the waste.

Property Owner - Owner of the property wherein an industry discharging to the PVSC facilities is located.

PVSC - Passaic Valley Sewerage Commissioners

Sanitary Waste - Waste derived principally from dwellings, office buildings, and sanitary conveniences. When segregated from industrial wastes, may come from industrial plants or commercial enterprises.

Strength of Waste - A measurement of suspended solids, and/or Biochemical Oxygen Demand, and/or Chemical Oxygen Demand, and/or any other parameter determined by PVSC as a fair indicator of the relative use, other than volumetric, of PVSC facilities by industrial wastes.

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Toxic Wastes in Toxic Amounts - Defined by USEPA in 40 CFR 129 (38 F.R. 24342, 9-7-73) and any subsequent revisions.

USEPA - United States Environmental Protection Agency

User Charge - A charge to users, established by PVSC, based on volume and, where applicable, on strength and/or flow rate to pay for the use of the PVSC facilities.

- 2) Any person, corporation or municipality, or other governmental agency desiring to make any sewerage connection or discharge or to continue to discharge sewerage, which includes or consists of industrial waste, into the PVSC treatment facilities, must make application therefor in writing on forms provided by the PVSC. All existing industrial users are required to make such application by June 1, 1977. Any new facilities shall be required to make application prior to the connection.
- 3). There shall be two major forms of Application:
- (a) Sanitary Application application from dwellings, groups of dwellings, or industrial or commercial establishments with only sanitary waste.
- (b) Industrial Application for industrial waste or storm water from an industrial site:

Sanitary applications shall be made by the owner of the property to the municipality, and no approval by PVSC is necessary unless a direct connection into a PVSC sewer is being requested. However, the municipality shall keep a record of the number of connections that are added and removed and shall make an annual report to the PVSC no later than February 1 of each year.

Industrial applications shall be made by the industry that generates the waste; however, the application must also be signed by the owner of the property wherein the industry is located. The industry shall be responsible for the quality and quantity of the waste, but the industry and owner of the property shall be jointly and severally responsible for any user charges or industrial cost recovery charges, and such charges when not paid may be made a lien against the property, and interest may be charged.

4) Any existing facility which proposes to make any change in its facility or its processing, which significantly affects either the quality or the quantity of its discharge into the sewerage system, shall be required to submit an Industrial Sewer Waste Revision Application showing the changes contemplated. Any new tenant or occupant of an existing facility shall be required to submit an Industrial Sewer Waste Revision Application. The application must be accompanied by a written approval of the particular municipality and owner of the property that are responsible for such sewerage.

- 5) Existing industries that have applied for permits may continue their discharge until their application has been processed by PVSC, unless in violation of Section 18, "Prohibited Wastes" of these regulations, or unless notified by PVSC to cease and desist their discharge.
- 6) Applications for Industrial Permits issued by PVSC shall be classified in one of these categories and the applicant and municipality shall be notified as expediently as possible:

Category I:

Class I-A permit which shall not be issued to an industry defined as a major industry is issued allowing industry to continue to discharge with no modification or pretreatment of flow.

Class I-B permit is issued allowing industry to continue to discharge with no modification or pretreatment of flow, but industry is considered a major industry and may be required to install monitoring equipment.

Category II:

Class II-A permit allows industry to continue to discharge pretreated wastes in accordance with standards established in the permit.

Class II-B permit allows industry to continue to discharge subject to change of characteristics of its waste by pretreatment or other means in accordance with a schedule as established or to be established in the permit.

Category III:

Permit denied and the discharge of illegal material must be halted or modified by a date established by PVSC.

PVSC reserves the right to change any Class permit to any other class permit, or to cancel permits upon notification by certified mail giving six months notice and giving the reason for the change.

- 7) Class I-A, I-B, and II-A permits shall be for an indefinite period of time unless cancelled or modified by PVSC.
- 8) Class II-B shall be for a period of time specified in the notice of classification requiring the industry to modify its discharge so that a Class II-A permit may be issued.
- 9) If an industry receives a Class II permit and disagrees with the findings of PVSC, it may appeal to the PVSC and request a hearing. The appeal shall be sent "Certified Mail" to the PVSC, 600 Wilson Avenue, Newark, N. J., 07105, within thirty days of notification by PVSC of the granting of the permit or of any modification of an existing permit. The Permittee shall obtain a return receipt showing date the appeal application was received by PVSC. During the time of appeal, the Class II permit requirements are stayed; however, the staying of such requirements shall not release any industry from the obligation of meeting any requirements and any time schedule set by NJDEP or USEPA.
- 10) Any appeal request shall be heard by the Commissioners. The findings of the Commissioners may be submitted to USEPA and/or NJDEP and upon approval by either or both shall either be incorporated in a new permit or the existing permit shall be reaffirmed.
- 11) An application submitted by a corporation must be signed by the principal executive officer of that corporation or by an official of the rank of corporate vice president or above who reports directly to such principal executive officer to make such applications on behalf of the corporation. In the case of a partnership, the application must be signed by a general partner or proprietor. If the owner of the property is a corporation, other than the applicant, then the application must also be signed by the property owner as per the above.

Where an application involves a governmental discharge, the person signing on behalf of a municipal, county or intra-State regional governmental unit; if the applicant is a State or multi-State agency, the application must be signed by that agency's principal executive officer or one who reports directly to him and is authorized to make applications on behalf of the governmental unit. Applications submitted by an agency of the United States should be signed by an official who is authorized to evaluate environmental factors on an agency-wide basis.

12) Each user municipality shall designate an official who shall have the responsibility to supervise and enforce municipal connections and sewer requirements. The name of such designated official shall be submitted to the PVSC by the municipality.

- 13) In addition to the application, each industrial user must complete an industrial survey form which is supplied by PVSC, unless the industrial user has previously completed and submitted such a form to the PVSC.
- 14) When the industry is classified as a Major Industry, it will install an approved, sealed, automatic monitoring system if requested to make such installation by PVSC.
- 15) No uncontaminated water (e.g. cooling water, etc.) shall be discharged into the PVSC system except with the prior written consent of the PVSC.
- 16) When pretreatment standards are adopted by USEPA for any given class of industries, then that industry must immediately conform to the USEPA timetable for adherence to Federal (and therefore PVSC) pretreatment requirements, and any other applicable requirements promulgated by USEPA in accordance with Section 307 of P.L. 92-500. Additionally, such industries shall comply with any more stringent standards necessitated by local conditions as determined from time to time by the PVSC.

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- Harata Albania Barata Berling 17) A PVSC inspector or authorized employee of PVSC, NJDEP, USEPA, or the municipality, must be given immediate access to any industry at any time during normal working hours or at any other time that an industry is discharging into either the PVSC system or into any of the waters under jurisdiction of the PVSC in order that the inspector may check the quality of the discharge, take samples, tests, and measurements. The state of the
- 18) The following wastes may never be discharged into the territorio de la compositiva della compositiva d PVSC system:
 - (a) Wastes that may create a fire or explosion hazard in the sewer, or wastewater facility, such as gasoline, fuel oil, cleaning solvents, etc.
 - Wastes that may impair the hydraulic capacity of the sewer system, such as ashes, sand, metal, etc.
 - Wastes that may create a hazard to people, the sewer system, the treatment process, or the receiving water, such as dangerous levels of toxic materials.

- 19) The following wastes may not be discharged without special permission, available on a case by case basis after the applicant proves the discharge not to be detrimental by reason of small volume:
 - (a) Any discharge in excess of 150°F (65°C).
 - (b) Any discharge containing more than background level of radioactivity.
 - (c) Any discharge containing more than 25 mg/l of mineral oil or grease.
 - (d) Any discharge containing floatable oil or grease.
 - (e) Any discharge of heavy metals, cyanides or any other toxic materials in toxic amounts, which amounts are to be established by PVSC.
 - (f) Any discharge quantities of flow or concentration which shall constitute a "slug". A "slug" shall mean a discharge of a rate of flow or concentration of any given constituent which exceeds for any period of 15 minutes more than five times the average daily concentration.
 - (g) Wastes with pH outside the limits of 5.0 to 9.0.
- 20) Each major industrial user shall construct or otherwise have available a sampling point for sampling wastewater before it enters the municipal sewer system. Other industrial users may be required to construct such sampling point.
- 21) No discharge into the treatment facilities of PVSC shall be permitted from any source which causes physical damage, interferes with the treatment process, or results in a violation of effluent limitations or other conditions contained in the National Pollution Discharge Elimination System Permit to Discharge issued to PVSC by the USEPA.
- 22) Wherein required by USEPA, NJDEP, or the PVSC permit, each industrial user shall monitor its flow and maintain records in accordance with 40 CFR 136.3 or subsequent amendments.

- 23) If the industrial user violates any of the terms of the permit or regulations, he shall be subject to civil and/or criminal penalties and fines in accordance with judicial procedures as provided for in Section 309 of P.L. 92-500.
- 24) Violation of any of the terms of the permit or regulations, or of any municipal ordinance, may result in the termination of the permit and/or termination of authorization to discharge into the PVSC system.
- 25) The within rules and regulations shall be effective August 1, 1976.

INDUSTRIAL SEWER CONNECTION APPLICATION

| Maille | |
|--|--|
| Number & Street | |
| Municipality | |
| Primary Standard Industrial | Classification Code |
| Principal Product | |
| Principal Raw Material | |
| Flow (Indicate the volume of waste discharged to the PVSC system in thousand gallons per day and whether | |
| the discharge is in- termittent or con- | |
| tinuous) | |
| · - | |
| property does hereby request dustrial sewer connection to | of the above weeks, lessee, tenant, etc.) a permit to an in- (install, use) discharge into the inch (size) |
| (municipality, PVSC) | ocated at |
| The size of the connection is | inches. |
| A plan of the property sh | owing accurately all sewers and drains |
| now existing, together with ex | isting or proposed sampling point, is |
| attached hereto as Exhibit "A" | • |
| Details of the connection 'B". | to the public sewer is shown as Exhibit |
| A schedule of all process | waters and industrial wastes produced |
| or expected to be produced at s | said property, including a description |
| f the character of each waste, | daily volume, maximum rates of dis- |
| harge, duration of discharge, | and a representative analysis is at- |
| ached as Exhibit "C". | |

| | The name and telephone number of the person to call for further |
|---------|---|
| detai | ls is |
| 3 | In consideration of the granting of this permit, the undersigned |
| agrees | 3: |
| (| To furnish any additional information relating to the installation or use of the industrial sewer for which this permit is being sought, if requested by PVSC. |
| (| 2) To accept and abide by all the rules and regulations of the PVSC and of the approving municipality. |
| | 3) To operate and maintain any waste pretreatment facilities, if such facilities are required by the USEPA, the NJDEP, or the PVSC, in an efficient manner at all times, at no expense to PVSC. |
| (4 | To cooperate at all times with the PVSC and their authorized representatives in their inspection, sampling and studying of the industrial wastes, and any facilities for pretreatment. |
| (5 |) If the industry is classified as a major industry (USEPA definition) then, if requested by PVSC, install sampling or monitoring equipment as approved by PVSC. |
| (6 | |
| (7) | To notify PVSC immediately in the event of an accident, negligence or other occurrence that occasions a discharge to the sewer of any waste not covered by the permit or of a discharge to any of the streams under the jurisdiction of the PVSC. |
| (8) | To comply with all applicable Federal and State statutes and regulations as well as the terms of any National Pollutant Discharge Elimination System Permit to Discharge issued by the United States Environmental Protection Agency to the PVSC. |
| DATE: _ | SIGNED: |
| | (Applicant) |
| | (Title) |
| _ | poration, attach resolution giving authority to make application. |

KLL005071

The undersigned hereby certifies that it is the owner of the property and agrees that it will be responsible for all user charges and/or industrial cost recovery for any industrial waste emanating from the above property, and failure to pay such costs when levied shall subject the property to a lien on such property not to be lifted until all such costs plus interest shall be paid. DATE: AND TO SIGNED: WE WAS and the con**titues** by the algorithm of the entries by the and the contribute of the first teach that the second of t If a corporation, attach resolution giving authority to sign application. Charles of the party hereby approves the above applica-(municipality) tion and certifies to PVSC that it will be responsible for payment for the wastewater discharge from the above plant into the PVSC system in accordance with the rules and regulations of the PVSC. SIGNED: DATE: (Authorized Municipal Official) TITLE: APPROVED AT PVSC BOARD MEETING OF F · F

SIGNED:

Clerk of the Passaic Valley Sewerage Commissioners

| | | Date: | | |
|--------|---|-------|--|--|
| | • | | | |
| Daf Na | | | | |

WASTE EFFLUENT SURVEY

(For Industries Served by the Passaic Valley Sewerage Commissioners)

| Plant Name: | |
|---------------------------------------|--|
| Address: | Zip |
| Person and Title to whom any further | r inquiries should be directed: |
| • | |
| Phone No.: | |
| umber of Employees: | |
| Number of Working Days Per Week: | |
| Number of Shifts Per Day: | |
| Area of Property: | Acres, or |
| Type of Industry and 4 digit U.S. Sta | andard Industrial Classification No.: |
| | |
| Finished Product(s): | the state of the s |
| Average Production: | |
| Raw Materials Used: | |
| Brief Description of Operations: | |
| | |
| | |
| | |
| | |

or

Water received in Gallons (Note: multiply cu. ft. x 7.48)

| Purchased water in 19 from: |
|--|
| 1st Quarter |
| 2nd Quarter |
| 3rd Quarter |
| |
| 4th Quarter |
| Well Water |
| 1st Quarter |
| 2nd Quarter |
| 3rd Quarter |
| 4th Quarter |
| Total well water received in 19: |
| River Water |
| 1st Quarter |
| 2nd Quarter |
| 3rd Quarter |
| 4th Quarter |
| Total river water taken in 19: |
| TOTAL OF ALL WATER RECEIVED IN 19: |
| Water Use in 19: |
| Water to Product (include evaporated and lost water): |
| Water to Sanitary Sewer: |
| Water to Storm Sewer, River or Ditch: |
| TOTAL WATER USE IN 19: |
| Name of River, Stream, or Tributary, and location of storm sewer or ditch outlet to river, stream, |
| or tributary: |

ANSWER THE FOLLOWING QUESTIONS ONLY IF THE PLANT WASTE INCLUDES WASTE ATTRIBUTABLE TO INDUSTRIAL OPERATIONS

(Note: Analyses should be based on a 24-hour composite sample)

| Characteristics of Plant Waste disc. if any. Indicate units of measure where a | | ined sewer, after treatmen |
|---|---|---|
| a) pH: | b) Turbidity: | |
| c) Temperature: | d) Radioactive? Yes. | No |
| e) Solids Concentration: | , | |
| 1) Total Solids | . Volatile | Mineral |
| 2) Suspended Solids | . Volatile | Mineral |
| f) Oil and Grease Concentration: 1) Floatable Oils | | · |
| 2) Emulsified Oils | | |
| g) Chlorides | | ······································ |
| h) Chemical Oxygen Demand (C.O.D.): | | |
| h) Chemical Oxygen Demand (C.O.D.): i) 5-day Bio-chemical Oxygen Demand (B.O. | | |
| j) Total organic carbon (T.O.C.): | | |
| k) Metallic Ions—Name and concentration (hex. and triv. Antimony, Lead, Mercury, total daily discharge of each metal.) | Copper, Vanadium, Nickel | ; give concentration and |
|) Toxic Material—Name and concentration | e.g., cyanide salts, etc.): | *** |
| n) Solvents-Name and concentration: | | • |
| m) Solvents—reame and concentration. | | |
| n) Resins—Name and concentration (Lacqu | ers, Varnishes, Synthetics): | |
| Date and time span of sample | | |
| Explain hours, method of discharge of continuing for 8 hours per day, 5 days per whinutes at 100 gal./min.) (Continuous 24 M.G.D.) etc. | eek at 100 gal./day rate) (be hours steady or with peak | patch twice a day for 20 s at 2 P.M., peak rate |
| | | |
| | • | |

| Characteristics of Plant Discharge Indicate units of measure where applicab | e to Storm Sewer, R ble (e.g., Mg/l). | iver, or Ditch, aft | er treatment if an | у |
|---|---|--|---|----|
| a) pH: | b) Turbidit | y; | | |
| c) Temperature: | d) Radioact | ive? Yes | No | |
| e) Solids Concentration: | , | | | |
| 1) Total Solids | Volatile | Miner | al | ٠. |
| 2) Suspended Solids | | | | |
| f) Oil and Grease Concentration: | | | . * | |
| 1) Floatable Oils | 11 | | ye e | |
| 2) Emulsified Oils | | | | |
| g) Chlorides | | | e Group of the second | |
| h) Chemical Oxygen Demand (C.O.D.): | | | Jane Style 1980 | |
| i) 5-day Bio-chemical Oxygen Demand (B. | .O.D.): | | , <u>, , , , , , , , , , , , , , , , , , </u> | |
| j) Total Organic Carbon (T.O.C.): | ••••• | | | |
| k) Metallic Ions—Name and concentration hex. and triv. Antimony, Lead, Mercur total daily discharge of each metal.): | ry, Copper, Vanadiu | m, Nickel; give o | concentration and | |
| | | | • | |
| Toxic Material—Name and concentration m) Solvents—Name and concentration: | | | | |
| n) Resins—Name and concentration (Lacq | quers, Varnishes, Syn | thetics): | | |
| o) Date and time span of sample: | ••••• | | · | |
| Do you pretreat any waste before discharge? . | | | | |
| If so, describe process and disposal of residue | removed: | | | |
| | | | | |
| Certification of Laboratory doing sample hall be those shown in the 13th edition of Stavestewater, where applicable. If no procedure of procedure used in analyses. | ling and making and andard Methods for | alyses shall be giv the Examination | en. Procedures | |
| | | itle of person prer | | |

KLL005076

OVERFLOW ANALYSIS

TO PASSAIC VALLEY SEWERAGE COMMISSIONERS

PASSAIC RIVER OVERFLOWS

YANTACAW STREET, CLIFTON NPDES. NO. 003

1976

ELSON T. KILLAM ASSOCIATES. INC.
Environmental and Hydraulic Engineers 48 ESSE2 STREET MILLSUMM NEW JESSES OTON-

PASSAIC VALLEY SEWERAGE COMMISSIONERS

PASSAIC RIVER OVERFLOWS

YANTACAW STREET, CLIFTON NPDES NO. 003

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| Storm Water Overflows | 4 |
| Storm Water Overflow Characteristics | 8 |
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| List of Illustrations | |
| Plate A Plan and Profile | 2 |
| Table 1 Overflow Observations | . 5 |

OVERFLOW DATA EXTRACT

YANTACAW STREET OVERFLOW NPDES NO. 003 CLIFTON

Chamber Location and Description

Overflow Chamber Status:

Inactive

Overflow to:

Third River, tributary to Passaic

Character of District

Served:

all Domestic and Industrial flow upstream to terminus of PVSC (main interceptor in Paterson area).

Overflow Location

(See Plate A):

at inlet siphon chamber upstream of Third River main line siphons

District Outlet Sewer * (See Plates A and B):

120" semi-elliptical concrete-

PVSC main intercepter

Outfall to River (See *Plates A and B):

2- 66" X 72" arched concrete

outfall lines

Outfall Condition:

clear to outfall point

Tidal Effects:

none

Surcharge Effects:

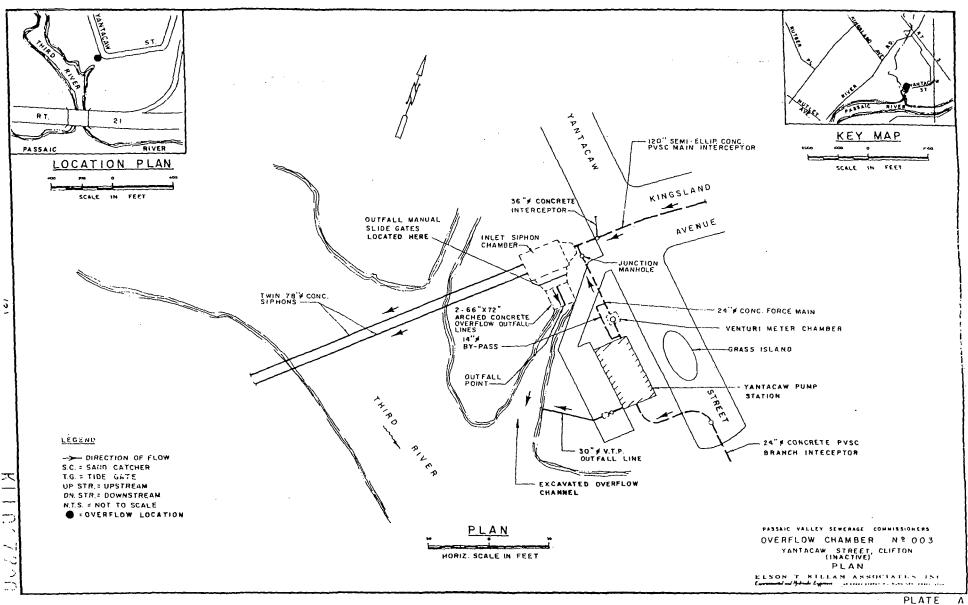
none

Overflow and Regulator Operation (See Plates *B and C):

Under normal dry weather flow conditions, the flow is diverted to the PVSC interceptor via the regulator. During periods of rainfall, a portion of the combined flow enters the interceptor, with the balance overflowing the stop logs and being discharged through the

outfall line into the Passaic River.

*Plates B & C - Not Applicable



YANTACAW STREET OVERFLOW CHAMBER (NPDES NO. 003) (Cont'd.)

Condition of Regulator:

not applicable - no regulator

present

Special Actions Required:

none

Overflow Stop Log/Dam

Condition:

not applicable - overflow controlled

by manual slide gate

. Tide Gate Condition:

not applicable - no tide gates

present

Note:

During the investigation, the Overflow chambers were examined, verifying information and dimensions

pertinent to this study. The verified information has been recorded

on Plate B (See boxed annotations).

Plate B-N/A

Area Served and Dry Weather Flow

Combined Area Served:

7.969 sq.mi.-5,100 acres(in Paterson

area)

Average Daily Flow

Seasonal Dry Weather: Seasonal Wet Weather: 99.2 MGD 122.0 MGD

Estimated Combined Flow to

Produce an Overflow:

not applicable-N/A

Approximate Length of Combined Sewers Serving

District:

 \pm 155 miles in greater Paterson area (+ 820,000 linear feet)

- J. J. J. J. J. C. L.

ELSON T. KILLAM ASSOCIATES, INC.

YANTACAW STREET OVERFLOW CHAMBER (NPDES NO. 003)

(Cont'd.)

Breakdown of Combined

Sewers:

Size Range

Linear Feet

not applicable - N/A (not a separate collection area)

Storm Water Overflows

Flow Measurement and Sampling Equipment Installed in: sampler installed in siphon inlet chamber at grating

Samples Collected:

Four 125-ml. samples each 3.75 minutes, compositing a 500-ml. sample each 15-minute period.

Activation of Sampler:

automatic (battery-powered) operation

Period of Observation:

N/A-no metering at this location

No. of Rainfall Occasions During Period:

N/A-no metering at this location

No. of Overflows Observed:

N/A-no metering at this location

No. of Meter Installations

N/A-no metering at this location

During Overflows:

N/A-no metering at this location

No. of Overflows Recorded During Period:

Table 1 presents pertinent data regarding rainfall characteristics, overflow measurements, and waste-

water quality observed.

Note: See Table 1

TABLE 1 OVERPLOW OBSERVATIONS

YANTACAW STREET, CLIFTON, N.J.

NPDES NO. 003

| | | 141 | WALL | | | | OVERPI | .ow | | | SAMPLING - WATE | R QUALITY | |
|------|--------|----------|-----------|-----------|----------|-----------|---------|--------|----------|---------|-----------------|-----------------|-----------------|
| | | | Average | Maximum | | | Average | | Sampling | Number | TSS | COD | BOD |
| Rain | Amount | Duration | Intensity | Intensity | Duration | Peak Rate | Rate | Volume | Duration | of | let Max Min Avg | let Max Min Avg | let Max Min Ave |
| Date | (In.) | (Brs.)_ | (In/Hr.) | (In/Hr.) | (Hre.) | (MGD) | (MCD) | (MG) | (Hra.) | Samples | (mg/1) | (1\gm) | (mg/l) |

9-25/27 2.95 45.00 0.065

* 5.00 20 434 672 240 451.2 692 892 476 662.8 336 383 197 259.3

NOTE: No metering was required at this location.

* Samples taken during rainfall conditions

1. 30

ELSON T. KILLAM ASSOCIATES, INC.

YANTACAW STREET OVERFLOW CHAMBER (NPDES NO. 003) (Cont'd.)

Range of Rainfall Observed:

N/A

Range of Rainfall Duration:

N/A

Range of Average Rainfall

Intensity:

N/A

Range of Average Rainfall Intensity vs. Duration producing no overflow (Table 1 and Plate E):

N/A

Range of Average Rainfall Intensity vs. Duration producing an overflow (Table 1 and Plate E):

N/A

Estimated Time of Concentration (Tc) to Overflow Chamber:

N/A

Range of Maximum Rainfall Intensity (i.e., during Tc) producing an overflow (Table 1):

N/A

Note: Overflow Prediction

Plate E presents the relationship of Average Intensity vs. Duration of Rainfall to describe conditions of overflow. The curve indicates a range of Intensities vs. Duration for which an overflow might be expected to occur.

Plate E - N/A

ELSON T. KILLAM ASSOCIATES, INC.

YANTACAW STREET OVERFLOW CHAMBER (NPDES NO. 003) (Cont'd.)

Range of Overflow Duration Observed:

N/A

Range of Peak Rate of Overflow Observed:

N/A

Range of Overflow Volume Observed:

N/A

Data for Maximum Observed Overflow: Date: Volume:

Peak Rate: N/A

Duration:

Note: Overflow Rate Estimation

Plate F presents the relationship of Maximum Rainfall Intensity vs. Peak Overflow Rate.

Plate F-N/A

RISON T. KILLAM ASSOCIATES, INC.

YANTACAW STREET OVERFLOW CHAMBER (NPDES NO. 003) (Cont'd.)

Storm Water Overflow Characteristics

Note:

Samples of Sanitary Flow (Baseline), as well as of Combined Flow during overflow, were analyzed, with results tabulated in the Appendix.

Parameters:

pH, TSS, VSS, COD, TOC, BOD, and Lithium determined for each sample. (See Appendix).

Parameters used in Analysis:

TSS, COD, and BOD.

Notes:

Data presented graphically for rainfallsof September 25-26,1975(sampling only). TSS, COD, and BOD, as well as flow data for storm and baseline.

Water quality data in Table 1 (Overflow Observations) are arranged to indicate the results of the first 15-minute sample, as a reference to possible initial strength at the onset of an overflow, as well as to indicate the maximum and minimum concentrations during the overflow period. An arithmetic mean (average) concentration is also listed for each characteristic, based on the number of samples obtained during the period of overflow.

ELSON T. KILLAM ASSOCIATES, INC.

YANTACAW STREET OVERFLOW CHAMBER (NPDES NO. 003) (Cont'd.)

| Storm Sampling (mg/l): | | Maximum | Minimum | Average |
|--|-------|--------------|----------|---------|
| | TSS | 672 | 240 | 451 |
| | COD | 892 | 476 | 663 |
| | BOD | 383 | 186 | 259 |
| Total Pounds for Observed Overflow: | Over: | flow Volume: | N/A -INA | CTIVE |
| , | TSS | | lbs. | |
| | COD | N/A | lbs. | |
| | BOD | | lbs. | |
| i i | | · | | |
| Baseline Sampling (mg/l): | | Maximum | Minumum | Average |
| • | TSS | 704 | 34 | 538 |
| | COD | 1080 | 712 | 937 |
| | BOD | 400 | 180 | 280 |

APPENDIX

ELSON T. EILLAM ASSOCIATES, INC.

YANTACAW STREET OVERFLOW CHAMBER (NPDES NO. 003) CONTENTS OF APPENDIX

| CONTENTS OF APPENDIX |
|--|
| Pages A-l to A-4PVSC Analysis of Baseline and Rainstorm samples. |
| Plate AlPlot of Total Suspended Solids (TSS) in milligrams per liter (mg/l) versus time of day during rainfall conditions. Portions of the baseline data are also shown for comparison. |
| Plate A2Plot of Chemical Oxygen Demand (COD) in milligrams per liter (mg/l) versus time of day during rainfall conditions. Portions of the baseline data are also shown for comparison. |
| Plate A3Plot of Biochemical Oxygen Demand (BOD) in milligrams per liter (mg/l) versus time of day during rainfall conditions. Portions of the baseline data are also shown for comparison. |
| Plate A4Plot of Total Suspended Solids (TSS) in milligrams per liter (mg/l) versus time of day during a baseline (non-rainfall) condition. |
| Plate A5Plot of Chemical Oxygen Demand (COD) in milligrams per liter (mg/l) versus time of day during a baseline (non-rainfall) condition. |
| Plate A6Plot of Biochemical Oxygen Demand (BOD) in milligrams per liter (mg/l) versus time of day during a baseline (non-rainfall) condition. |

PVSC Reference # B-46

Date: 2/13/75

Elson T. Killam Associates - Infiltration Studies Yantacaw St., Clifton - Overflow Chamber 0940 - 2/10/75 to 0950 - 2/11/75

Sampler #401, Set #12 O.F. #003

Baseline

24 samples

| _ | i | | | | | | | | | |
|--------|-----|-------|-----|-------|------|-----|------------|-----|------|-------------|
| SAMPLE | рH | TSS | VSS | %Vol. | COD | TOC | TOC CUD | ВОД | BOD | LIthi |
| 1 | 4.1 | 604 | 504 | 83.5 | 1080 | 320 | 29.6 | 305 | 28.2 | 0.00 |
| 2 | 8.5 | 410 | 410 | 100.0 | 932 | 200 | 21.5 | 218 | 23.4 | 0.00 |
| 3 | 8.6 | 590 | 300 | 50.8 | 712 | 210 | 29.5 | 250 | 35.1 | 0.00 |
| 4 . | 7.6 | 702 | 364 | 51.8 | 936 | 220 | 23.5 | 303 | 32.4 | 0.00 |
| 5 | 7.5 | 532 | 314 | 59.1 | 904 | 260 | 28.8 | 314 | 34.8 | 0.00 |
| 6 | 7.4 | 34 | 34 | 100.0 | 888 | 250 | 28.2 | 282 | 32.0 | 0.01 |
| 7 | 7.3 | 656 | 656 | 100.0 | 1028 | 280 | 27.3 | 318 | 30.9 | 0.01 |
| 8 ′ | 7.4 | 574 | 338 | 58.9 | 964 | 320 | 33.3 | 400 | 41.5 | 0.01 |
| 9 | 9.0 | 592 | 344 | 58.2 | 920 | 230 | 25.0 | 292 | 31.7 | 0.01 |
| 10 | 9.2 | . 618 | 408 | 66.2 | 960 | 300 | 31.3 | 340 | 35.4 | 0.03 |
| 11 | 8.4 | 586 | 384 | 65.5 | 968 | 350 | 36.2 | 360 | 37.2 | 0.01 |
| 12 | 6.4 | 238 | 92 | 38.6 | 956 | 290 | 30.3 | 283 | 29.6 | 0.01 |
| 13 | 7.1 | 482 | 344 | 71.4 | 858 | 250 | 28.2 | 280 | 31.6 | 0.010 |
| 14 | 7.3 | 484 | 388 | 80.3 | 936 | 270 | 28.8 | 278 | 29.7 | 0.00 |
| 15 | 7.3 | 528 | 394 | 74.7 | 940 | 280 | 29.8 | 300 | 31.9 | 0.00 |
| 16 | 7.2 | 500 | 402 | 80.4 | 944 | 290 | 30.7 | 274 | 29.1 | 0.00- |
| 17 | 7.3 | 520 | 406 | 78.2 | 960 | 300 | 31.3 | 380 | 39.6 | 0.00 |
| 18 | 7.3 | 534 | 380 | 71.2 | 948 | 260 | 27.5 | 238 | 25.1 | 0.007 |
| 19 | 7.2 | 670 | 532 | 79.5 | 964 | 330 | 34.3 | 238 | 24.7 | 0.000 |
| 20 | 7.5 | 698 | 544 | 78.0 | 956 | 250 | 26.2 | 205 | 21.5 | 0.00 |
| 21 | 7.5 | 548 | 414 | 75.5 | 960 | 240 | 25.0 | 180 | 18.8 | 0.00- |
| 22 | 8.5 | 704 | 538 | 75.5 | 952 | 280 | 29.4 | 254 | 26.7 | 0.00 |
| 23 | 8.1 | 578 | 412 | 71.3 | 932 | 260 | 27.9 | 205 | 22.0 | 0.00 |
| 24 | 7.3 | 532 | 378 | 71.2 | 856 | 240 | 28.0 | 215 | 25.1 | 0.00 |
| | | : | | | | | 28.8 | | 29.9 | |

| PVSC Reference # | I-175 | Date | 9/17/75 |
|-------------------|---------------------------|------|---------|
| Elson T. Killam / | Associates - Infiltration | | |
| | | C1 | v . a |

Yantacaw-Clifton 9/17/75 Sampler M.C. Set # 8

| | 1 | 6-Sa | mples | | | Bas | eline | | | _ |
|--------|--------------|----------|------------|-------|------|------|-------------|-----|-------------|-------------|
| SAMPLE | pH | TSS | VSS | %Vol. | COD | TOC | 10C 700% | BOD | BOD CUU% | |
| | 18 | NO | Samp | les | _ | | | _ | | - |
| 19 | 6.2 | 128 | 106 | 82.8 | 896 | 300 | 35.9 | 650 | 72.6 | |
| 20 | 2.7 | 194 | 186 | 96.0 | 1320 | 520 | 39.4 | 982 | 74.4 | |
| 21 · | 6.7 | 186 | 164 | 88.1 | 576 | 190 | 33.0 | 331 | 57.4 | <u> </u> |
| 22 | 7.0 | 162 | 108 | 66.7 | 636 | 200 | 31.5 | 502 | 78.8 | |
| . 23 | 5.0 | 118 - | 94 | 79.6 | 1148 | 580 | 50.5 | | | |
| 24 | 5.3 | 132 | 110 | 83.3 | 1052 | 520 | 49.3 | | <u> </u> | |
| | | | ļ. <u></u> | | AVER | AGE | 39.9 | | 70.8 | |
| : | | | | | | | | | | · . |
| : | | <u> </u> | | | | | | | | |
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| PVSC | Reference | $\ddot{\pi}$ | J-180 | |
|------|-----------|--------------|-------|--|

Date:

Elson T. Killam Associates - Infiltration Studies Yantacaw St. , Overflow Chamber 19:20 - 9-24-75 Start

Ch. No. -003 Set #43 Sampler No. 357

Rainfall of 9/24/75

| | 5 SA | MPLES | Kaillia | ll of 9/ | 24/13 | | | TORM CO | NDITIONS | |
|--------|------|-------|---------|----------|-------|---------|-------------|---------|-----------|------|
| SAMPLE | pН | TSS | VSS | %Vol. | COD | TOC | TOC COD% | BOD | BOD (CO)% | |
| 1. | 7.2 | 802 | 646 | 80.6 | 1107 | 260 | 23.5 | 437 | 39.5 | |
| 2. | 7.5 | 604 | 448 | 74.3 | 533 | 220 | 41.3 | 315 | 59.3 | |
| 3 | 7.4 | 526 | 348 | 66.3 | 553 | 180 | 32.6 | 407 | 73.7. | |
| 4. | 7.6 | 470 | 310 | 66_1 | 646 | 140 | 21.7 | 316 | 48.9 | |
| .5. | 8.1 | 452 | 304 | 67.3 | 400 | 145 | 36.3 | 294 | 73.5 | |
| | | , | | | | Average | 31_1 | | 59.0 | |
| | · | | | | | | | ! | | • •. |
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| PVSC | Reference | π^{μ} | |
|------|-----------|-------------|--|
|------|-----------|-------------|--|

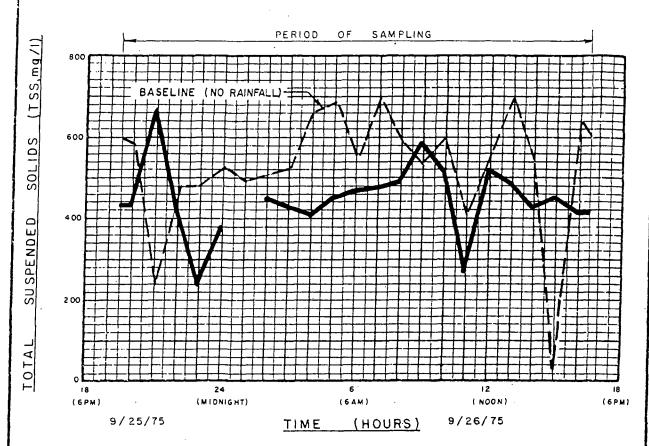
Date: 19/16/75 CH-NO-003 Set # 76 Sampler No. 351

Elson T. Killam Associates - Infiltration Studies Yantacaw St., Clifton-Overflow Chamber Trunkline 16:50-9/25/75 to 22:05-9/26/75

Rainfall of 9/25/75 - 9/26/75

| SAMPLES | STORM | CONDITION |
|---------|-------|-----------|
| | | |

| | 20 SAMPLES | | | | | | STORM CONDITION . | | | | |
|----------------|------------|--------|-------|-------|-----|-----|-------------------|------|-------------|---|--|
| SAMPLE | рH | TSS | Vss | %Vol. | COD | TOC | TOC CUD% | BOD | BOD GOU% | | |
| 1 | No | Sample | - | _ | - | _ | _ | _ | _ | F | |
| 2 | 7.7 | 434 | 308 | 760 | 692 | 240 | 34.7 | 336 | 48-7 | | |
| 3 . | 7.4 | 672 | 450 | 67.0 | 740 | 240 | 32.4 | 317 | 42.9 | | |
| 4 | 7.1 | 42.4 | 312 | 73.6 | 644 | 220 | 34.2 | 382 | 59.3 | | |
| _. 5 | 7.3 | 240 | 164 | 68.3 | 768 | 200 | 26.0 | 232. | 30.2 | | |
| 6 | 7.5 | 382 . | 266 | 70.0 | 664 | 190 | 28.7 | - | - | 1 | |
| 7 . | No Sai | ple | | - | - | - | - | - | - | - | |
| 8 . | 7.7 | 452 | 330 | 73.0 | 892 | 220 | 24.7 | 264 | 29.6 | | |
| 9 · | 7.4 | 432 | 308 | 71.3 | 692 | 160 | 23.1 | 273 | 39.5 | | |
| 10 | 7.6 | . 414 | 286 | 69.1 | 816 | 160 | 19.6 | 207 | 25.3 | | |
| 11 | 7.9 | 450 | 330 | 73.3 | 584 | 130 | 22.3 | 197 | 33.8 | | |
| 12 | 7.4 | 474 | 356 | 75.1 | 612 | 120 | 19.6 | 207 | 33.8 | | |
| 13 | 7.8 | 480 | 342 | 71.2 | 648 | 190 | 29.4 | 273 | 42.2 | | |
| 14 | 7.7 | 494 | 358 | 72.5 | 616 | 180 | 29.2 | 207 | 33.6 | | |
| 15 | 7.6 | 588 | 400 | 68.0 | 608 | 170 | 27.9 | 251. | 41.3 | | |
| 16 | 8.0 | 518 | 362 | 70.0 | 604 | 140 | 23,2 | 186 | 30.8 | | |
| 17 | 7.3 | 270 | 184 | 68.1 | 688 | 150 | 21.8 | 186 | 27.0 | | |
| 18 | 6.0 | 522 | 352 | 67.4 | 744 | 200 | 26.9 | 224 | 30.1 | | |
| 19 | 7.3 | 484 | 324 | 66.9 | 712 | 200 | 28.1 | 383 | 55.2 | | |
| 20 | 7.5 | 424 | 292 | 68.9 | 476 | 170 | 35.7 | 311 | 65.4 | | |
| 21 | 7.6 | 458 | 292 | 63.8 | 508 | 180 | 35.4 | 251 | 49.5 | | |
| 22 | 7.5 | 412 | 228 | 55.3 | 548 | 160 | 29.2 | 229 | 41.7 | | |
| | | | AVERA | GE | | | 27.6 | | 40.0 | | |
| | | | | | | | | - | | | |
| | | | | | | | | | | | |



- TIME SHOWN IS BASED ON MILITARY TIME, 1-24 HOURS.
- SAMPLING REPRESENTS RAINFALL TSS CONDITIONS.
- THIS OVERFLOW HAS BEEN CLASSIFIED AS INACTIVE.

KLL017734

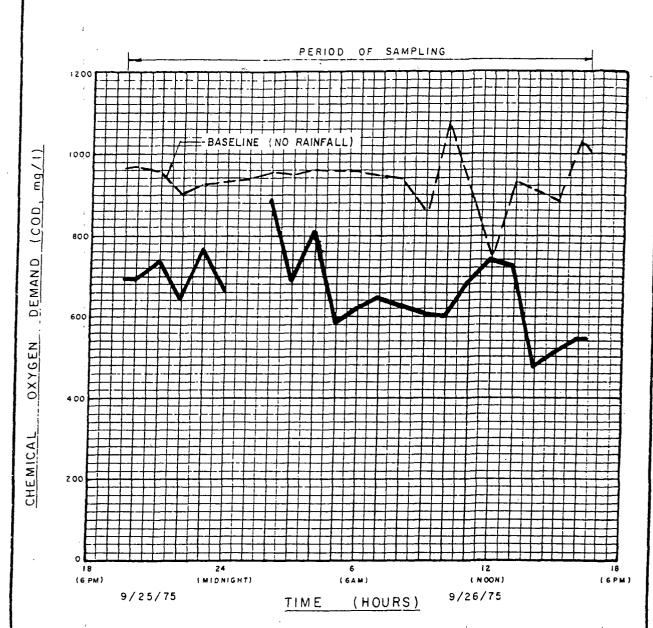
PASSAIC VALLEY SEWERAGE COMMISSIONERS OVERFLOW CHAMBER Nº 003

YANTACAW STREET, CLIFTON

SUSPENDED

RAINFALL OF 9/25 - 26/75

ELSON T. RILLAM ASSOCIATES, INC.



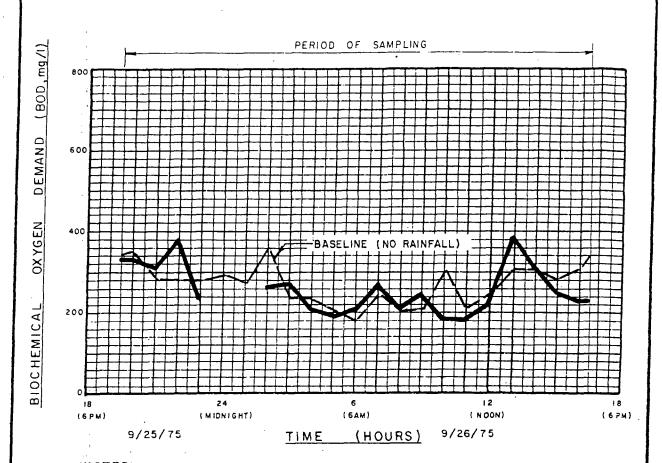
- I TIME SHOWN IS BASED ON MILITARY TIME, 1-24 HOURS.
- 2. SAMPLING REPRESENTS RAINFALL COD CONDITIONS
- 3. THIS OVERFLOW HAS BEEN CLASSIFIED AS INACTIVE.

PASSAIC VALLEY SEWERAGE COMMISSIONERS
OVERFLOW CHAMBER Nº 003
YANTACAW STREET, CLIFTON

CHEMICAL OXYGEN DEMAND

RAINFALL OF 9/25 - 26/75

ELSON T. KILLAN ASSOCIATES INC Emeronasial and Hebrahe Engineers — an expersional section in control ergo



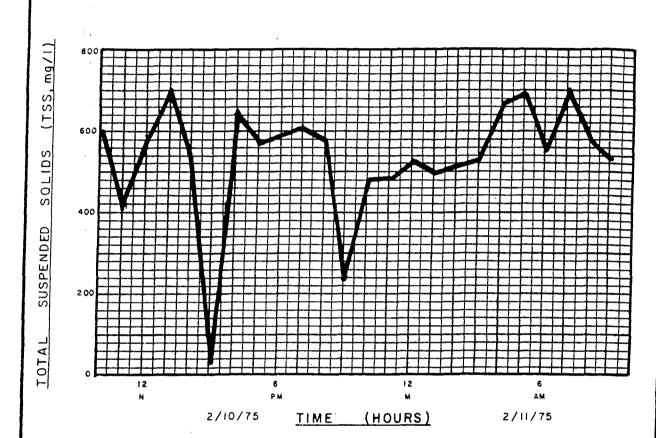
- time shown is based on military time, 1-24 hours.
- 2. SAMPLING REPRESENTS RAINFALL BOO CONDITIONS.
- 3. THIS OVERFLOW HAS BEEN CLASSIFIED AS IMACTIVE.

PASSAIC VALLEY SEWERAGE COMMISSIONERS
OVERFLOW CHAMBER Nº 003
YANTACAW STREET, CLIFTON

BIOCHEMICAL OXYGEN DEMAND

RAINFALL OF 9/25 - 26/75

ELSON T. KILLAM ASSOCIATES, INC. Environmental and Historia Engineers of experimental and Historia Engineers.



- SAMPLING STARTED 9:40 AM 2/10/75 SAMPLING ENDED 9:40 AM 2/11/75
- 2. SAMPLES TAKEN EACH IS MIN.PERIOD, COMPOSITED EACH HOUR; RESULTS ARE PLOTTED HOURLY.
- SAMPLING REPRESENTS TYPICAL NON-RAIN- .
 FALL TSS CONDITIONS IN 24 HOURS.

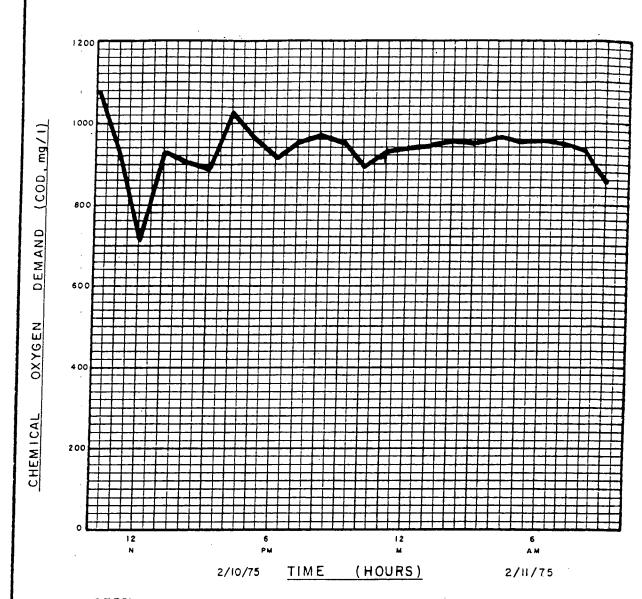
PASSAIC VALLEY SEWERAGE COMMISSIONERS
OVERFLOW CHAMBER Nº 003

YANTACAW STREET, CLIFTON

TOTAL SUSPENDED SOLIDS

NO RAINFALL

ELSON T. KILLAM ASSOCIATES, INC.



NOTES!

- SAMPLING STARTED 9:40 AM 2/10/75 SAMPLING ENDED 9:40 AM 2/11/75
- SAMPLES TAKEN EACH 15 MM. PERIOD, COMPOSITED EACH HOUR; RESULTS ARE PLOTTED HOURLY.
- 3. SAMPLING REPRESENTS TYPICAL NON-RAIN-FALL COD CONDITIONS IN 24 HOURS.

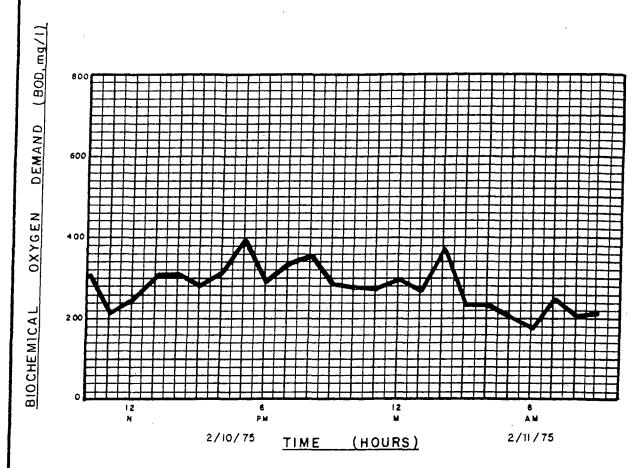
PASSAIC VALLEY SEWERAGE COMMISSIONERS
OVERFLOW CHAMBER Nº 003
YANTACAW STREET, CLIFTON

....,

CHEMICAL OXYGEN DEMAND

NO RAINFALL

ELSON T. KILLAM ASSOCIATES, INC.



- I. SAMPLING STARTED 940 AM 2/10/75 SAMPLING ENDED 9:40 AM 2/11/75
- SAMPLES TAKEN EACH 15 MIN.PERIOD, COMPOSITED EACH HOUR; RESULTS ARE PLOTTED HOURLY.
- 3 SAMPLING REPRESENTS TYPICAL NON-RAIN-FALL BOD CONDITIONS IN 24 HOURS.

OVERFLOW CHAMBER Nº 003

YANTACAW STREET, CLIFTON

BIOCHEMICAL OXYGEN DEMAND

NO RAINFALL

ELSON T. KILLAM ASSOCIATES, INC.

AFFIDAVIT OF SEYMOUR A. LUBETKIN

STATE OF FLORIDA S COUNTY OF Palm Breeks

: Seymour A. Lubetkin, having been duly sworn, affirms:

- 1. I, Seymour A. Lubetkin, was the Chief Engineer of the Passaic Valley Sewerage Commissioners ("PVSC") between 1954 and 1978. I have personal knowledge of the matters discussed in this Affidavit.
- 2. Education and Employment: I hold a Master of Civil Engineering (1957) and a Master of Science in Electrical Engineering (1950). I received a Bachelor of Science in Mechanical Engineering in 1947. I am a member of Tau Beta Pi, the national honorary engineering society, and a Diplomate to the American Academy of Environmental Engineers. I received the Dr. H. Heukelekian Industrial Waste Award from the New Jersey State and Federal Water Pollution Control Association in 1973, and the William D. Hatfield Award for Outstanding Performance in the Operation, Management and Advancement of Knowledge in the field of Water Pollution Control in 1983. I am listed in Who's Who in Engineering. I have served as an arbitrator for the New York Stock Exchange.
- 3. In 1950, I was employed as Assistant Chief Engineer of the PVSC. In 1954, I was promoted to the position of Chief Engineer, which I held until 1978. As Chief Engineer, I directed all operations of the PVSC, the largest sewerage authority in New Jersey. I was responsible for the annual operating budget of the PVSC, of almost \$9 Million, as well as the PVSC's purchasing, investments, and accounting procedures. I directed the activities of the PVSC's more than 200 employees, including the Operating, Engineering, Inspection and Maintenance Personnel (which included the Bypass Crews). I established pollution control programs involving industrial permits, sewer use ordinances, river and industrial monitoring and pretreatment systems. I wrote the PVSC annual reports and testified as an expert on pollution and the solutions to the problems it causes.

- 4. I am currently a consulting engineer. I am the author of several articles, in addition to the Annual Reports to the Passaic Valley Sewerage Commissioners for the Years 1971, 1972, 1973, 1974, 1975 and 1976 ("Annual Reports").
- 5. Bypassing: Some of the municipalities discharging into the PVSC system had combined sewers. Because the capacity of the PVSC's treatment plant and trunk line was not sufficient to handle all the waste together with rain water generated in times of peak flow, between 1950 and 1978 the PVSC periodically discharged untreated sewage, including industrial waste streams, directly to the Passaic River. Therefore, the untreated waste of every municipality, including industries, connected to a municipal sewer line served by the PVSC between 1950 and 1978 was diverted to the Passaic River on a periodic basis. The practice of diverting sewage directly to the River was called "bypassing."
- 6. Because the capacity of the trunk line did not change materially, I believe that PVSC continued to bypass untreated waste to the Passaic River after 1978.
- 7. **PVSC's Trunk Line:** Before 1902 when the PVSC became a legal entity, most municipality within the PVSC's jurisdiction developed a sewer system which discharged directly to the Passaic River through a discharge line ending in an outfall on or near the River's banks. Between 1912 and 1924, the PVSC constructed a trunk line which runs approximately along the River and intersected the discharge lines of the municipal lines close to the municipal outfalls along the River. In 1924 the PVSC went into operation and collected the waste, formerly being discharged to the Passaic River, into its trunk line. This trunk line carried the waste from the municipal lines directly to the PVSC's treatment plant at Newark Bay near the mouth of the Passaic River.
- Some of the sewer lines connected to the PVSC's trunk line were combined sewer systems. In these combined sewer systems, stormwater runoff flowed directly into the municipal sewer lines along with wastewater. When it rained, the volume transported by these combined sewer systems into the PVSC's trunk line would increase dramatically. These increases in the

volume handled by the trunk line often exceeded the capacity of the treatment system and the trunk line to handle the waste material. Unless the waste was bypassed to the River, the sewage in the trunk line would back up into the municipal lines and overflow into points connected to the system, including homes.

- 9. Outfalls: Attached to this Affidavit as Exhibit A is a copy of the first National Pollutant Discharge Elimination System ("NPDES") permit issued to the PVSC. The permit, No. NJ0021016 issued effective February 28, 1975, lists the outfalls from the municipal systems handled by the PVSC. Page 13 of the permit lists the discharge points to the Passaic River owned by the PVSC. Outfalls there numbered 001 and 002 were to handle only treated effluent from the PVSC's treatment plant. The remaining outfalls listed there, numbered 003 to 007, inclusive, carried untreated sewage upstream of the PVSC's treatment plant. The PVSC used these outfalls to bypass sewage and rainwater to the River.
- 10. The permit, at pages 14 through 19, lists an additional 67 outfalls that carried untreated sewage. The PVSC used these outfalls to bypass sewage and rainwater to the Passaic River or its immediate tributaries.
- 11. The outfall listed in the 1975 NPDES Permit on page 13 and there numbered 003 was also known as the Yantacaw Street Bypass. This bypass carried all the effluent handled by the PVSC upstream of the junction of the Third River and the Passaic River. This outfall was the largest bypass in the system.
- 12. The outfall listed in the 1975 NPDES Permit on page 19 and there numbered 074 was also known as the Second River Joint Meeting Sewer. The Second River Joint Meeting Sewer was a mini-trunk line, built by the Second River municipalities, Montclair, Glenridge, Bloomfield and part of Nutley. It connected all of their sewage systems to the PVSC's trunk line. When this Second River Joint Meeting Sewer was bypassed to the River, all of the waste handled by these municipal systems went directly into the River.

- 13. **Mechanics**: In most instances, the PVSC's trunk line ran below the municipal sewer outfall line. The municipal outfall line was connected to the PVSC's trunk line through a chamber constructed so that gravity would carry waste headed down the municipal line into the trunk line and to the PVSC's treatment plant instead of to the River. However, the remainder of the old municipal line was usually kept as a bypass, if needed. In many places float operated valves were constructed to automatically operate the bypasses during high sewer levels.
- 14. When I was first employed by the PVSC, most of these connections had inoperable automatic bypass valves. These automatic bypass valves were supposed to have been controlled by the float. As the trunk line became full, the float was supposed to rise in the chamber and, in theory, close a valve on the connection between the municipal sewer and the trunk line. Once this valve was closed, the waste would flow directly along the old outfall directly into the Passaic River. However dirt, rags and sand continually got under the floats keeping them from opening the valves when the sewage level dropped causing by-passing during periods when it was not necessary. Constant maintenance was not sufficient to rectify the problem.
- 15. Because these automatic bypasses did not operate properly, the floats were disconnected and the flap valve which they formerly controlled was then operated manually with a chain. Thus no bypassing would occur unless it was done manually, or unless the sewage level became so high that it overflowed an adjustable level weir.
- 16. On the east side of the River, many of the bypass valves were simple weirs. In these weirs, the sewage would fall into the trunk line until the capacity of the trunk line was so full that it backed up to the top of the weir, and then it would overflow the weir directly into the River.
- 17. The largest bypass, the Yantacaw Bypass had two sets of gates operated by hoists -- one set in the trunk line and one set on the outfall to the Passaic River. Normally, the gate to the trunk line was open and the gate to the Passaic River outfall was closed. To bypass

the trunk line, the Bypass Crew opened the gate to the River and closed the gate to the trunk line. This bypassed all of the sewage in the trunk line upstream of Third River. The second largest line bypass, the Second River Joint Meeting Sewer, similarly had two sets of gates that were operated with hoists. This one bypassed all the sewage in the Joint Meeting Sewer.

- 18. Incidents Requiring Bypasses: The PVSC bypassed waste to the River in the following instances:
 - a. when it rained and the volume of flow in the system threatened to exceed capacity;
 - b. when it was necessary to reduce the flow in order to repair sewer lines;
 - c. when discharges occurred accidentally, as when the flap valve closed because the chain had broken or come unattached; and
 - d. when a breakdown occurred at the pumping station or treatment plant and it was necessary to limit flow for repairs or to prevent further damage during repairs.
- 19. Rain: Where the rain increased the volume of flow in the trunk line, the PVSC would bypass waste directly to the River in varying quantities in order to control the flow of waste in the trunk line and at the treatment plant. As Chief Engineer, I was in charge of directing the Bypass Crew operations. The Bypass Crew was on call 24 hours a day.
- 20. Only the amount of waste necessary to protect the system was bypassed. The smaller bypasses in the City of Newark were usually employed first. The Second River Meeting Sewer was the "next-to-the-last resort." This line was easy to bypass because the gates were in the line maintenance yard at Second River owned by the PVSC so they were readily accessible to PVSC personnel. Finally, the "last resort" was the Yantacaw Bypass. Bypassing this system as referred to as "having to throw Yantacaw," as in "the rain was so bad we had to throw Yantacaw."

Newark, indirectly by subtraction of meters in and along the trunk line. The billable flow for each municipality was calculated weekly using readings from these flow meters along the trunk line. Subtracting the volume of an upstream meter from a downstream meter gave the volume received by the trunk line between those meters. Each municipality paid for its percentage contribution of the total sewage contributed to the PVSC system.

- 26. If the flow was bypassed to the River because of high volume in the trunk line between two meters, the flow metered in the bypassed area would be reduced. This reduced flow would result in a lower billing ratio for the municipality in the by passed area. This lower billing ratio would confer an unjustified economic benefit on the affected municipality.
- 27. To correct for this unjustified benefit, a formula was developed that computed a weighted average flow for use during periods when bypasses artificially reduced actual flow. Under this formula, the PVSC calculated an average flow for each municipality based on flow rates during periods when no waste was bypassed. This average flow rate was used to calculate the amount of sewage bypassed in some areas. In other areas the flow charts were modified to add back the estimated amount bypassed. These calculated and estimated flows were added to the municipality whose flow was affected by the bypassing. Using these flows a percentage was calculated for billing purposes and used instead of the unfair results if this was not done.
- 28. The PVSC kept records of when waste was bypassed so that it could determine when the flow in any municipality had been artificially reduced. These records showed the bypass used, and the amount of time the bypass was open.
- 29. What Waste Was Bypassed: I have not reviewed PVSC's records of the volumes of waste bypassed in preparing this Affidavit. Except as I have expressly stated, I have not estimated the volume of waste bypassed. However, the practice of bypassing was so necessary and frequent that I conclude that the wastestream of every entity connected to a municipal sewer system serviced by the PVSC was bypassed untreated to the Passaic River at some time or another.

- 21. As I discuss in greater detail below, the PVSC kept accurate records of the amount of waste bypassed to the River. I have not reviewed those records in preparing this Affidavit. I have, however, reviewed the charts showing rainfall, River flow and input to the PVSC treatment plant contained in the Annual Reports for the Years 1972, 1973, 1974, 1975 and 1976. I have attached these charts to this Affidavit as Exhibit B-1 through B-10. These charts illustrate that on several occasions each year, the River flow rose significantly, but the volume received at the treatment plant fell below the average daily flow for the year. I believe that in these instances the Yantacaw Street Bypass was thrown, and the waste it carried was bypassed to the River.
- Repairs: The PVSC also bypassed sewage into the Passaic River to repair the sewage lines. For example, as reported at page 55 of the Annual Report for the Year 1971, floods in August of 1971 broke the Second River Joint Meeting Sewer. A 400-foot section of the Second River Joint Meeting Sewer had to be replaced because of this break. However, because of the break, approximately 40 million gallons of waste was discharged to the river from the Second River Joint Meeting Sewer per day between August 28 to September 3, 1971. A large amount of sewage was also bypassed to the Passaic River during the repair of a major crack in the trunk line under McCarter Highway during the month of March 1974. Details of this repair and its problems are presented on page 21 of the 1974 Annual Report.
- 23. **Records**: The PVSC maintained accurate records of the number of bypasses and the estimated volume of bypassed material. The PVSC used these records to calculate the fees to be charged to the municipalities using the PVSC's system.
- 24. Each municipality using the PVSC's facilities paid a percentage of the operating expenses of the PVSC. The percentage was based on the ratio between the volume of the municipality's waste and the total waste handled by the PVSC.
- 25. The volume of waste contributed by each municipality was measured by flow meters. Some by direct measurement as the waste went into the PVSC line and some, such as

- 30. The various waste sources commingled in the various municipal sewers and these combined wastes commingled in the trunk line. If a main bypass, such as Yantacaw or Second River was opened, all the waste upstream from that point went into the River. Thus when Yantacaw was opened, the waste from Paterson, Passaic, Clifton, Garfield and many other municipalities upstream of Third River, went into the River. When Second River was bypassed the sewage from Monclair, Orange, Glen Ridge, Bloomfield, and East Orange went to the River. Other bypasses discharged waste from various sections of municipalities. Therefore, opening a bypass in Newark bypassed waste from all tributary industries located in that section.
- 31. Except as expressly noted here, I have not had an opportunity to review records to identify the entities, especially industry, connected to the municipal sewer systems serviced by the PVSC whose waste was bypassed untreated to the Passaic River.
- 32. The Annual Reports for the years 1971, 1972, 1973, 1974, 1975 and 1976 contain discussion of discharges to the Passaic River that were found to be polluting. These discharges are identified in the Reports by the name and address of the generator. These are in addition to the bypass discharges discussed in this affidavit. For example, the Annual Report for the Year 1971 at page 118 mentions a green florescent dye discharged into the storm sewer from Thomasset Colors at 120 Lister Avenue in Newark. Most of the parties identified in these Annual Reports, like Thomasset Colors, were also connected municipal sewer systems serviced by the PVSC but may have had direct lines to the River or to a storm sewer. Although these lines were only to be used for clean water discharges, waste discharges did occur.
- 33. In addition, in 1972, the PVSC conducted an Industrial Waste Survey of industries within its service area. I have attached to this Affidavit as Exhibit C a copy of the letter and questionnaire that was sent to approximately 3000 industries by the PVSC in 1972. By the time I wrote the Annual Report to the Commissioners for 1972, 277 industries had completed and returned these questionnaires. The PVSC subsequently sent and received more completed questionnaires. These completed questionnaires identify industries whose waste was

discharged into municipal systems serviced by PVSC and whose waste is sometimes bypassed to the Passaic River as a result of the practice I have described in this Affidavit.

Seymout A. Lubetkin

STATE OF FLORIDA §
COUNTY OF PAlmBuhchy §

Before me, Seymour A. Lubetkin, known to me (or proved to me on the oath of Seymour A. Lubetkin) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this _____ day of January, 1994.

SHARON L. MOLLENHAUER
MY COMMISSION # CC 297691
EXPIRES: June 28, 1997
Bonded Thru Notary Public Underwriters

Shala + Malforhain

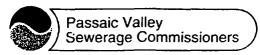
NOTARY ACKNOWLEDGEMENT

| STATE OF Florida COUNTY OF PATEN Sch. Cfg. |
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| |
| The foregoing instrument, Afficlauit by Seymoux A Labelth. |
| The foregoing instrument, Afficiault By Seymoux A Labelth. was acknowledged before me this 6+ day of Bruay 1994 by Seymour A. Lubetkin |
| The state of the s |
| () Who is personally known to me or |
| Who has produced 1132-78/23-105 8414 as identification, |
| who has produced |
| who { } did { \ did not take an oath, |
| |
| Train L. Molonham |
| Acknowledger (Signature) |
| |
| |
| Shanner Mollanhauer |
| Acknowledger (Printed) |
| Title CCA |

IRENE G. ALMEIDA CHAIRMAN

JAMES KRONE VICE CHAIRMAN

FRANK J. CALANDRIELLO DOMINIC W. CUCCINELLO CARL S. CZAPLICKI PEYER A. MURPHY ANGELINA M. PASERCHIA THOMAS J. POWELL DONALD TUCKER COMMISSIONERS



600 WILSON AVENUE NEWARK, N.J. 07105 (973) 344-1800 FAX: (973) 344-2951 www.pvsc.com

Industrial Dept. Fax: (973) 344-4876 July 28, 1999

Mr. Art Wegener Sandvik 15-01 Nevens Road FairLawn, NJ 07410 CERTIFIED RECEIPT Z 282 909 031

ROBERT J DAVENPORT

EXECUTIVE DIRECTOR

PETER G. SHERIDAN

CHEIF COUNSEL

LOUIS LANZILLO

CLERK

Re: Notice Of Violation Permit: 08401682 Violation Date: 5/26/99 Section Violated: 312.1 (b)

Dear Mr. Wegener,

On 07/12/99 a routine inspection was made of your pH control system. The pH recorder tapes were reviewed for the period from 5/20/99 to 7/7/99. During May, specifically 5/26/99, the pH recorder charts showed non-compliance above 10.5 for 3 hours. PVSC was not notified of these excursions. Federal Regulations do not permit pH excursions below 5.0 for any length of time. In addition, the pH may exceed 10.5 provided it is not more than 1% in any calendar month or more than 1 Hour at any particular time. As a result, the Sandvik has violated the PVSC Rules and Regulations as outlined below:

- 312.1(B) refers to the discharge of corrosive waste which could cause damage to the sewer system.
- 314.1 refers to the notification procedure to be used in the event an individual user is unable to
 comply with the limitations contained in the PVSC Rules and Regulations or in the Sewer
 Connection Permit.

Please respond to this letter in writing within 10 days with an explanation of these excursions and a plan to eliminate them in the future. Failure to do so could lead to fines and other penalties. You should forward your response to the attention of the Industrial Department. If you have any questions concerning this matter, please contact Glenn Mc Laughlin at (973)-817-5724.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Frank P. D'Ascensio

Manager of Industrial & Pollution Control

FPD/sml

cc Robert Davenport, Executive Director
Andy Caltagirone
Borough of Fairlawn

INDUSTRIAL VIOLATION INFORMATION

| PERMITNO: 0840 | 1682 | · | • |
|------------------------|------------------|---------------------------------------|---|
| COMPANY NAME: | SANDVIK | · · · · · · · · · · · · · · · · · · · | |
| LOCATION: 15-01 | Vewers RD | COMMUNITY: FAIRLAWN | |
| VIOLATION DATE: 5 | 126,99 | SECTION VIOLATED: 3/2./ B | |
| DESCRIPTION: PH- | out of Complian | NCE FORMAL NOTICE SENT: 1/e | S |
| SCHEDL ELIMIN: _/_ | ACTUAL | ELIMIN: <u>812 199</u> | |
| VISIT 1: <u>812199</u> | COMMENT 1: Resp. | PONSE - 111-3026 | |
| VISIT 2: _/_/_ | COMMENT 2: | | |
| VISIT 3://_ | COMMENT 3: | · | |
| VISIT 4: _/_/ | COMMENT 4: | · | |

Glenn,

Sandvik Coromant IS OVER THE THRESHOLD FOR CU IN MARCH

ART

ALYTICAL TESTING LABORATORIES

SDEP CERTIFICATION NO. 20477

PO BOX 368, KENILWORTH N.J. 07033 (908)241-5040 fax (908)241-5356

ANALYSIS REPORT

ATT: WILLIAM DUROW

SANDVIK

1702 NEVINS ROAD

FAIRLAWN, NEW JERSEY 07410

CODE NO: 19993

DATE RECEIVED: 03/08/02

DATE SENT: 04/11/02

SAMPLE TYPE: WATER

SAMPLE ID: OUTLET #1 03/08/02

| SAMPLE NO | PARAMETER | RESULT | ANALYZED | UNITS | MDL | METHOD |
|------------------------|------------------|---------|------------|-------|-------|--------|
| | | | | | | |
| 1 999 3 -01 | BOD ₅ | < 2.0 | 0 03/13/02 | mg/L | 2.00 | 405.1 |
| | TSS | 25.5 | 03/08/02 | mg/L | 4.00 | 160.2 |
| | рH | 6.9 | 03/08/02 | | | 150.1 |
| | METALS: | | | | | |
| | CADMIUM | 0.006 | 5 04/05/02 | mg/L | 0.005 | 213.1 |
| | COPPER | 0.128 | 3 04/05/02 | mg/L | 0.02 | 220.1 |
| | LEAD | 0.060 | 04/05/02 | mg/L | 0.025 | 239.1 |
| • | NICKEL | 0.044 | 04/05/02 | mg/L | 0.02 | 249.1 |
| | ZINC | 0.037 | 7 04/05/02 | mg/L | 0.005 | 289.1 |
| BEFORE TR | EATMENT | | | | | |
| 19993-02 | CYANIDE, total | < 0.020 | 03/19/02 | mg/L | 0.020 | 335.2 |
| AFTER TRE | ATMENT | | | | | |
| 19993-03 | CYANIDE, total | < 0.020 | 03/19/02 | mg/L | 0.020 | 335.2 |

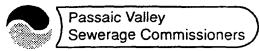
REMARKS: MDL = METHOD DETECTION LIMIT J = DETECTED BUT BELOW MDL

DIRECTOR

DONALE) TUCKER CHAIRMAN

CARL S. CZAPLICKI, JR. VICE CHAIRMAN

ANTHONY W. ARDIS FRANK J. CALANDRIELLO ALAN C. LEVINE ANGELINA M. PASERCHIA KENNETH R. PENGITORE THOMAS J. POWELL COMMISSIONERS



100th Anniversary 1902 - 2002

600 WILSON AVENUE NEWARK, NJ 07105 (973) 344-1800 Fax: (973) 344-2951

www.pvsc.com Industrial Fax # (973) 344-4876 September 30, 2003 ROBERT J. DAVENPORT EXECUTIVE DIRECTOR

JAMES KRONE
DEPUTY EXECUTIVE DIRECTOR

JOSEPH A. FERRIERO CHIEF COUNSEL

LOUIS LANZILLO CLERK

Certified Receipt 7002 0860 0004 7768 1253

Sandvik Coromant Co. 1702 Nevins Road Fair Lawn, NJ 07410 Attn: Jouko Tahvananninen

Notice of Violation Permit: 08220005 Violation Date: 7/03

Section Violated: 312.1 (b) & 314.1

Dear Mr. Tahvananninen:

On 9/15/03, an inspection was made of your pH control system. The pH recorder charts were reviewed for the period of 7/9/03 to 9/2/03. On 7/18/03, your pH recorder tapes recorded 10 minutes below 5.0. PVSC was not notified of this excursion. Federal Regulations do not permit pH excursions below 5.0 for any length of time. In addition, the pH may exceed 10.5 provided it is not more than 1% in any calendar month or more than 1 hour at any particular time. Consequently, Sandvik has violated the PVSC Rules and Regulations as outlined below:

- 312.1 (b) refers to the discharge of corrosive wastes, which could cause damage to the sewer system.
- 314.1 refers to the notification procedure to be used in the event an individual user is unable to comply with the limitations contained in the PVSC Rules and Regulations or in the Sewer Connection Permit

You are required to respond in writing within 10 days of receipt of this letter with an explanation for the above violation and a plan to eliminate future violations of this type. Failure to do so may result in enforcement action. You should be made aware that continued violation of the PVSC Rules and Regulations could subject your facility to fines of up to \$50,000 per day per violation. Therefore it is imperative that you make every effort to prevent future excursions. If you have any questions concerning this matter, please contact Art Peluso at (973) 817-5723.

Very truly yours,
Passaic Valley Sewerage Commissioners

Andy Caltagirone

Manager of Industrial & Pollution Control

AC/jt

C: Robert J. Davenport, Executive Director Ric Quintieri Borough of Fair Lawn

12/23/03



New Jersey

EPA ID#: NJD980654107

EPA REGION 2

Congressional District(s): 05,09

Bergen
Borough of Fair Lawn

NPL LISTING HISTORY Proposed Date: 12/1/1982 Final Date: 9/1/1983

Site Description

The Fair Lawn Well field site is comprised of three municipal wells that supply drinking water to the 32,000 residents of Fair Lawn, Bergen County, New Jersey. All three wells are part of the Westmoreland Well Field. In 1978, volatile organic compounds (VOCs) were detected in these municipal supply wells located within and adjacent to the Fair Lawn Industrial Park. In an effort to identify the origin of the contamination, the New Jersey Department of Environmental Protection (NJDEP) investigated all industrial and commercial facilities within a 3,000 foot radius of the contaminated wells. The investigation concluded that the primary source of the contamination was located in Fair Lawn Industrial Park. As a result of the investigation, two local companies, Fisher Scientific Company and Sandvik, Inc., have been identified as contributing sources to the groundwater contamination. The site is bounded predominantly by industries of Fair Lawn with the Fair Lawn Industrial Park to the northeast and the Passaic River to the southwest. Several residences are within 300 feet of the site.

Site Responsibility: This site is being addressed through Federal, State and potentially responsible parties' actions.

Threat and Contaminants

VOCs were detected in the groundwater from the three municipal wells. The threat due to exposure to the contaminated groundwater has been significantly reduced, since air strippers are currently treating contaminated groundwater from the municipal wells prior to distribution to the residents.

Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial action. The immediate action of wellhead treatment has addressed the municipal well contamination, while the long-term action will focus on the entire groundwater cleanup and controlling potential sources of contamination.

Response Action Status

Immediate Actions: In 1984, the potentially responsible parties (PRPs), Fisher Scientific Company and Sandvik, Inc., removed contaminated soil from a portion of their property. In 1987, the Borough of Fair Lawn installed air strippers to treat the contaminated wells. The PRPs later reimbursed the Borough for the installation of the air strippers and provided funding for future operation and maintenance activities.

Long-Term Actions:

Source Areas: Under NJDEP oversight, both Fisher Scientific and Sandvik conducted an investigation of their facilities. Fisher has installed cut off trenches and pumping wells at their facility to collect contaminated groundwater for on-site treatment and discharge to a publicly owned water treatment works. Sandvik has removed and disposed of soil and buried drums, and is periodically monitoring the groundwater.

Groundwater: In September 1992, EPA became the lead agency for the site cleanup, and initiated a Remedial Investigation and Feasibility Study (RI/FS) to determine the nature and extent of the groundwater contamination and contributing sources.

Site Facts

In 1984, an Administrative Order on Consent (AOC) was signed with the State by both Fisher Scientific and Sandvik to

Fair Lawn Well Field 1 12/7/06

conduct an on-site investigation of soil and groundwater, removal and disposal of contaminated soils, long-term monitoring of on-site groundwater quality, and payment to the Borough of Fair Lawn for installation, and operation and maintenance of the air stripper. Subsequently, due to a change in ownership, the Fisher site became subject to the Environmental Cleanup Responsibility Act (ECRA). An AOC was later signed in 1986 by Fisher Scientific's parent company, Allied Signal, and the State for continuation of remedial activities, including construction of a groundwater collection system.

During May and June of 1995, EPA, in conjunction with the Fair Lawn Health and Water Department, conducted a residential well sampling and analysis program to determine the quality of residential well water and its usage. It was determined that the residential wells were used either for irrigational purposes or for potable purposes. The sampling results of the program indicated that the wells used for potable purposes met established drinking water standards.

In March 1997, in an effort to gather additional information on the groundwater contamination, EPA requested information from several facilities within Fair Lawn concerning the nature and quantity of certain materials which they may have generated, treated, stored or disposed of at their facilities. In December 1998, EPA requested additional information from several other facilities within the Fair Lawn Industrial Park concerning the nature and quantity of their material. In January 2000, EPA requested information from several realty corporations who own property within the Fair Lawn Industrial Park concerning former and/or present lessees of their property. EPA has continued to search for additional potential sources of groundwater contamination.

In April 1999, EPA entered into an Interagency Agreement (IAG) with the United States Geological Survey (USGS) for their technical assistance in developing a groundwater flow model. This model would be used to define contaminant plume(s) and capture zones from existing pump and treat wells in order to determine if any further actions are necessary. The project was conducted in three phases: Phase I had the USGS assessing all of the existing site hydro-geological data; Phase II had the USGS performing an aquifer slug testing and collecting water quality samples from five identified wells, and begin construction of a hydro-geological groundwater flow model; and Phase III had the USGS collecting additional hydro-geological data from another identified well and use that data to continue developing the groundwater flow model.

Following the submittal of a draft groundwater study and model report, EPA requested several additional activities included further calibration of the model, calculation of the average area recharge rate, and a sensitivity analysis. A revised draft report was submitted to EPA in July 2003. This revised draft report was reviewed by EPA and after incorporating some additional information into the report at the request of EPA, a final groundwater study and model report was submitted by the USGS to EPA in September 2004. This report presented and discussed those areas contributing VOC-contaminated groundwater to the Westmoreland well field. The results of this report will be used to develop a possible follow-up groundwater investigation and/or active cleanup strategy, if necessary.

Based on a review of responses from information requests and the newly completed groundwater study and model report, EPA issued notice of potential liability letters to Fisher Scientific, Sandvik, and Kodak in March 2006. These notice letters requested that the PRPs complete a remedial investigation and feasability study at the Site. All three companies have collectively responded to this notice and are negotiating with EPA on a settlement to complete the work and reimburse the agency for costs expended to date.

Currently, the PRPs are addressing contamination found on their properties through Administrative Orders with the NJDEP.

Cleanup Progress

The immediate actions described above have greatly reduced the potential for exposure to contaminated groundwater and soil at the Fair Lawn Well Field site while further investigations are taking place. The impacted public supply wells are currently being treated to remove contaminants and to ensure that the public is provided with a safe drinking water supply. The air stripper located at the Westmoreland Well Field is continuing to treat approximately 0.2 million gallons per day of contaminated groundwater.

Site Repositories

USEPA Records Center 290 Broadway, 18th floor New York, NY 1007 (212) 637-4308

PASSAIC VALLEY SEWERAGE COMMISSION NEWARK, NEW JERSEY

HEAVY METALS SOURCE DETERMINATION STUDY

IN COMPLIANCE WITH OCEAN DUMPING PERMIT No. I NJOO3 INTERIM, SECTION 9(c)



August 15, 1978

Elson T. Killam Associates, Inc.



Elson T. Killam Associates Inc.

27 Bleeker Street, Millburn, New Jersey 07041 Telephone (201) 379-3400 Environmental and Hydraulic Engineers



Passaic Valley Sewerage Commission 600 Wilson Avenue Newark, New Jersey 07105

Attention: Mr. Carmine T. Perrapato,

Executive Director

Re: Letter of Transmittal

Heavy Metals Source Determination Study

Gentlemen:

We are pleased to submit herewith, the Phase I, Heavy Metals Source Determination Study report. This Phase I study and report has laid the groundwork for the Phase II Study which will commence in the near future.

The Phase I work defines actual metal quantities in the system. The Phase II work will define actual metal quantities measured at each of the individual metal contributing industries.

As a result, after integration of the Phase I and II work, the facilities plan for the land-based disposal of sludge will be able to accurately project heavy metals concentrations which will ultimately be in the sludge.

Very truly yours,

ELSON T. KILLAM ASSOCIATES, INC.

Peter J. Krinsky

Emil C. Herkert

esb

Search

Title:

Tools with treated surfaces

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Abstract:

A method is disclosed for treating the surface of tools made of tool steel, wherein primary carbides are embedded in the tool steel matrix. The thickness of the primary carbides disposed near the surface can be reduced by forming a surface which has point-wise recess; alternatively, the primary carbides can be completely removed. A hard material layer is deposited on this surface. The invention also describes tools made of tool steel, wherein primary carbides are embedded in the tool steel matrix. The primary carbides are significantly recessed, and a hard material layer is deposited thereon.

Adhesive film to give appliances a stainless steel look inexpensively.

Thermal Spray, Diffusion, Plastics Cer

Custom Coating

Carbide Wear Parts Superior Carbide Tooling

Band Saw Blades & Bindery Supplies

Blocks & Sprays

Nano, Micro & Macro Ranges Instruments & Testing

3X Faster 2X Smoother 3X Tool Life

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Claims: What is claimed is:

- 1. A method for treating a surface of tools made of a tool steel and having primary carbides embedded in a steel matrix of the tool steel, comprising: exposing the primary carbides embedded in a steel matrix by at least one of uncovering and cutting, forming a recess in the surface for one of detaching or removing the exposed primary carbides, and depositing a hard material coating on the surface, the hard material coating comprising at least one layer.
- 2. The method according to claim 1, wherein alloy components of the detached or removed primary carbides are at least partially used for alloying a bottom of the recess, a wall of the recess or an edge of the recess so as to fill and seal cracks and round and smooth the recesses.
- 3. The method according to claim 1, wherein the hard material coating is deposited at least partially concurrent with the detaching or removing the exposed primary carbides, and reactions which at least one of remove and supply material under participation of components of the primary carbide, fill the recesses, so that a top surface of the coating layer exhibits at most slight recesses above the detached or removed primary carbides.
- 4. The method according to claim 1, wherein following the disposition of the hard material coating, a low friction slide layer is deposited on the hard material coating.
- 5. The method according to claim 4, wherein the slide layer comprises MoS.sub.2 or hexagonal BN
- 6. The method according to claim 1, wherein exposed primary carbides are cleaned in such a way that the hard material coating is deposited in cracks formed proximate to the exposed primary carbides, for sealing the cracks and to reattaching the detached primary carbides in the steel matrix.
- 7. The method according to claim 1, wherein after the detachment or removal of the primary carbides and before the deposition of the hard material coating, the steel matrix is etched so as to produce a micro-roughness between 2 and 5 .mu.m.
- 8. The method according to claim 7, wherein producing the micro-roughness causes a formation of a micro-tooth arrangement between the hard material coating and the steel matrix for improving the resistance against alternating shear stress and improving adhesion of the hard material coating to the steel matrix.
- 9. The method according to claim 7, wherein after the detaching or removal of the primary carbides and the etching, however before the deposition of the hard material coating, the steel matrix is treated thermo-chemically in such a way that growth nuclei are created in grain boundary regions, which growth nuclei facilitate layer growth in the grain boundary regions and thereby provide an additional form-fitting anchoring mechanism between the hard material coating and the steel matrix.
- 10. The method according to claim 1, wherein the primary carbides are galvanically or chemically removed or dissolved to a predetermined depth of between at least 1 .mu.m and twice the thickness of the hard material coating by a separate process using a liquid medium.
- 11. The method according to claim 1, wherein the hard material layer is deposited using a CVD process.
- 12. The method according to claim 11, wherein immediately before the hard material coating is deposited using the CVD process, at least one gas is selected for at least one of removing and dissolving the primary carbides to a predetermined depth of between at least 1 .mu.m and twice the

layer thickness in the same CVD process.

- 13. The method according to claim 1, wherein the hard material coating is deposited using a PVD process.
- 14. The method according to claim 13, wherein before the hard material coating is deposited with the PVD process, a marginal region of the steel matrix is nitration-hardened with a plasma to a depth of one hundred times the thickness of the hard material coating.
- 15. A tool made of a tool steel comprising: primary carbide particles embedded in the tool steel, and a hard material coating having at least one layer and deposited by a CVD process on a surface of the tool steel, wherein the primary carbides are recessed from the surface of the tool steel by a predetermined amount between at least 1 .mu.m and approximately twice the thickness of the hard material coating, thereby providing distributed form-fitting anchors between the hard material coating and the surface of the tool steel, which anchors improve the resistance of the hard material layer against alternating shear stress and also improve adhesion.
- 16. The tool according to claim 15, wherein above the recessed primary carbides, the CVD hard material coating forms coating recesses substantially conformal with the recessed primary carbides and having a depth of between at least 1 .mu.m and approximately twice the thickness of the hard material coating, the coating recesses operating as lubrication pockets.
- 17. The tool according to claim 15, wherein the CVD hard material coating comprises a micro-tooth arrangement disposed between the CVD hard material coating and the surface of the tool steel, thereby increasing adhesion between the hard material coating hard material coating and the tool steel.
- 18. The tool according to claim 16, wherein the CVD hard material coating extends at least partially in the tool steel to a depth of half the thickness of the hard material coating, thereby providing an additional anchoring mechanism between the hard material coating and the tool steel.
- 19. A tool made of a tool steel comprising: primary carbide particles embedded in the tool steel, and a hard material coating having at least one layer and deposited by a PVD process on a surface of the tool steel, wherein the primary carbides are recessed by a predetermined amount between at least 1 .mu.m and approximately 4 .mu.m, thereby providing distributed form-fitting anchors between the hard material coating and the tool steel, which anchors improve the resistance of the hard material layer against alternating shear stress and also improve adhesion between the hard material coating and the tool steel.
- 20. The tool according to claim 19, wherein the PVD hard material coating further comprises a micro-tooth arrangement disposed between the hard material coating and the tool steel.
- 21. The tool according to claim 19, wherein the PVD hard material coating comprises coating recesses located above the recessed primary carbides and operating as lubrication pockets for storing a lubricant.
- 22. The tool according to claim 19, wherein a marginal region of the tool steel is additionally strengthened by plasma nitration-hardening to a depth of about 100 times the thickness of the hard material coating.
- 23. The tool according to claim 16, wherein the coating recesses act as a friction-reducing depository for a lubricant.
- 24. The tool according to claim 23, wherein the lubricant is molybdenum disulfide (MoS.sub.2) or hexagonal boron nitride (hBN).
- 25. The tool according to claim 21, wherein the lubricant is molybdenum disulfide (MoS.sub.2) or hexagonal boron nitride (hBN).

Description:

FIELD OF THE INVENTION

[0001] The present invention relates to a method for surface treatment of tools made of tool steel and having a matrix with embedded primary carbides, as well as tools having a steel matrix with embedded primary carbides and a treated surface.

BACKGROUND OF THE INVENTION

[0002] Since quite some time, high-performance tools are provided with hard coatings to increase wear resistance. These coatings consist, for example, of nitrides, carbides, carbo nitrates and borides, which are formed at least of one metal taken from the group consisting of titanium, zirconium, chromium, tungsten, tantalum, vanadium, niobium and hafnium, with at least one light element, such as nitrogen, carbon and/or boron. The layers are deposited preferably with a CVD technique (CVD for chemical vapor deprivation) or PVD (PVD for physical vapor deprivation).

[0003] The tools are preferably made of ledeburitic cold work steel and high-performance high-speed steels (HSS). The hardness of these steels can be increased substantially by a suitable heat treatment. These steels can also incorporate very hard carbides which are embedded in the steel matrix. A distinction has to be made between primary (large) carbides and secondary (small) carbides. These carbides, in particular the primary carbides, such as carbides of the type M.sub.7C.sub.3, enhances the wear resistence of the tool steels, which makes the incorporation of a large carbide fraction by intended alloying of the steel highly desirable.

[0004] While the rounded secondary carbides which are only several micrometers in diameter, are relatively uniformly distributed in the steel matrix, meaning that they are not critical for the fracture mechanics, the more voluminous primary carbides which are two to three orders of magnitude larger, are relevant for the fracture mechanics. The effect is even more pronounced if the (mostly) coarse-grain primary carbides form distinct (carbide) rows and/or (carbide) clusters. Due to the different physical material characteristics (the steel matrix exhibits (micro) plastic characteristics/carbides which have a significantly higher elastic module, exhibit only linear-elastic characteristics, and not plastic characteristics), even a moderate external load tends to produce high strain peaks, which can produce cracks affecting the functionality.

[0005] The primary carbides, in particular carbides in surface regions exposed to high stress, are therefore critical starting points for (brittle) stress fractures in tools. The primary carbides have a built-in defect potential which is enhanced by cutting and machining of the surface as cutting of the brittle carbides in the shear plane of the cut leaves fragile rough carbide surfaces with isolated detached carbide particles. In regions with greater accumulation of carbides, brittle defect regions are formed which cannot support an external load, are formed, which produce initial microscopically small surface damage at highly stressed slide planes. The surface damage expands very rapidly particularly in the highly stressed regions, i.e., near protrusions, curved surfaces or cutting edges, followed by a sudden tool malfunction.

[0006] These microscopically small defect structures are present in all carbide-rich cast steels after metal cutting. Within certain limits, the defect structures can be smoothed by finish-machining, for example, by lapping or polishing, but are unlikely to be completely eliminated. Finish-machining may be sufficient for uncoated slide planes designed for a "normal" load, since the troubling defects can be reduced farther during a break-in period, wherein after the break-in a sufficient load-bearing capacity is acquired (training effect).

[0007] If on the other hand, the slide surfaces are coated, then such break-in periods are not feasible due to the applied, highly wear-resistant protection layer. Under these different conditions, the large (primary) carbides which are cut near the surface, may produce an additional potential malfunction when in contact with the superimposed hard material layer. This malfunction may have the following aspects:

[0008] (1) Layered hard materials, like carbides, have material characteristics that are significantly different from those of steel-iron materials (significantly higher elastic moduli, smaller expansion coefficients, etc.). Under load, these layers exhibit only linear-elastic, but not plastic characteristics. Due to the large elastic module, crack-free layer excursions are limited in the elastic region. As a result, an upper load limit is reached at relatively small layer excursions, with the steel matrix still exhibiting elastic properties, while cracks are formed in the hard material layer. This phenomenon which is known from the metal-ceramic layer technology and typical for composite materials, requires treatment of the composite layer-steel in spite of the microscopically small dimensions as a very demanding building block, if a high load-bearing capability and wear resistence are desired.

[0009] (2) The hard material layers disposed on the steel are always subjected to a (high) tangential internal stress and are therefore capable of absorbing perpendicular to the surface layer excursions in the vertical direction without forming cracks--while simultaneously reducing the tangential internal stress in the elastic range. An excess load applied vertically on a point on the surface, which creates a plastic deformation in the underlying base material, can be absorbed by the layer without forming cracks, as long as tangential internal stress is still present in the region of maximum excursion. As a result, uneven regions in highly stressed slide planes can be smoothed permanently,

wherein the ceramic nature of the hard material layers prevents the overloaded contact locations from becoming welded together, which may otherwise be the case. As a result, the load-bearing capability of specific layers of the system is automatically improved, which may explain the high load-bearing capability of such hard material layers.

[0010] (3) Although the layers exhibit advantages layer characteristics under a vertical excess load, the effect of a load introduced tangentially into the layer may be viewed differently. Layer excursions induced in the horizontal direction by large local friction forces are advantageously absorbed along the force direction due to the internal stress of the layer. However, a shear motion is introduced relative to adjacent regions which are less stressed and which therefore also have a smaller displacement, wherein the shear motion can be transmitted by the layer only within linear-elastic limits without creating cracks. The relative excursions, however, are smaller than in the steel matrix due to the high elastic module of the layered materials, so that a local horizontal excess load may form cracks in the layer relatively quickly. In addition, because the base material has a smaller elastic module, it can continue to be elastically deformed, independent of the inherent reserve for additional deformation in the plastic range.

[0011] (4) The discussions under (2) and (3) only apply to the situation where the hard material layer is connected with a homogeneous steel matrix. If, however, carbide inclusions are embedded in the marginal zone of the steel matrix, then these attributes become less applicable with increasing size (in relation to the layer thickness) of the carbides or the carbide formation. When the diagonal dimensions of the carbides are approximately twice the layer thickness, then the carbides anchored in the base material resemble non-movable pillars in a flowing stream. The carbides complicate the stress characteristics between the layer, the carbide and the base material, and the defect potential and the tendency to form tears also increases noticeably. In particular with a threshold load, and more particularly with a changing load, the stress in contact with large carbides can cause fractures. The "fixed points" in the carbide are sometimes viewed as desirable anchor points of the layer for enhancing the adhesion properties. However, this applies only to a small carbide size in the range of the layer thickness, i.e., only to the secondary carbides discussed above.

[0012] (5) Finish machining, in particular polishing, of the surfaces disadvantageously removes the carbides more slowly because of their larger hardness than the hardened, but nevertheless softer steel matrix, so that after extended polishing a raised, so-called carbide relief is formed. This relief extends the layer surface. Such raised portions (frequently in the order of the layer thickness) are only rarely recognized before coating. Their frequency increases with the size of the carbide or with the carbide concentration. Higher relief structures can significantly weaken the load-bearing fraction. The accumulation of material and the changing shear forces can cause the raised portions to become detached, to break off and to create--as typical secondary damage--grooves extending through the layer. The broken-out damaged areas form attack points for cold welding, which causes striations and scoring of the contacting slide partner.

[0013] (6) A similar, but less pronounced relief structure can also be formed if the preceding sputter cleaning, which in PVD processes precedes the actual coating phase to improve the adhesion of the layers, was too intense. This is due to the fact that for carbides the threshold energy for removing material is always greater than for the steel matrix, so that the steel matrix is sputtered off more quickly

[0014] (7) The intensity of the defect concentration inherent in the composite system can be appreciated even more when taking into consideration the aforedescribed defect potential in fragile and partially dislodged primary carbides associated with cutting operations, in particular at angled surface transitions, and more particular with small radii, protruding corners and cutting edges.

[0015] It could be concluded from considering these defects, that steels free from primary carbides have a more advantageous load-bearing capacity. Such steels, however, have neither a sufficient hardness nor an adequate temperature resistance. In particular, they do not adequately support the hard material layers under high loads, as required for high-performance tools.

[0016] It is therefore an object of the invention to eliminate the aforedescribed defect potentials of the primary carbide and to provide a tool which has a highly reliable layer system which can withstand high loads and is resistant to wear.

SUMMARY OF THE INVENTION

[0017] According to one aspect of the present invention, in a method for surface treatment of tools made of tool steel and having primary carbides embedded in a steel matrix of the tool steel, the primary carbides are uncovered and/or cut and/or protrude in form a relief on the surface. The primary carbides are then either detached by forming a point-wise recessed surface or are entirely

removed, and a single-layer or multi-layer hard material layer is deposited on the surface.

[0018] According to another aspect of the present invention, a tool made of a tool steel has primary carbides embedded in a steel matrix of the tool steel and a surface manufactured according to the aforedescribed method. The primary carbides are either recessed in a marginal steel region by a predetermined amount between at least 1 .mu.m and approximately twice the layer thickness or are completely removed. A single-layer or multi-layer CVD hard material layer completely fills these recesses or cavities together with components of the removed primary carbides, thereby providing point-wise distributed form-fitting anchors for the layers in the base material. The anchors improve the resistance of the hard material layer against alternating shear stress and also improve adhesion.

[0019] According to yet another aspect of the present invention, a tool made of tool steel has primary carbides embedded in a steel matrix of the tool steel and a surface manufactured according to the aforedescribed method. The primary carbides in a marginal steel region are recessed by a predetermined amount between at least about 1 .mu.m and 4 .mu.m and a PVD hard material layer coats or fills the recesses, thereby providing point-wise distributed form-fitting anchors for the layers in the base material to increase the resistance of the PVD hard material layer against alternating shear stress and improve the adhesion. To further increase the load-bearing capability of the compound system, a micro-tooth arrangement between the hard material layer and the base material is also provided, as well as a nitration-hardening of the marginal region of the steel. According to an aspect of the invention, the hard material layer can be deposited by either a CVD or a PVD process.

BRIEF DESCRIPTION OF THE DRAWINGS

[0020] FIG. 1 shows a schematic diagram of an untreated surface of a tool;

[0021] FIG. 2 shows a schematic diagram in which a primary carbide is electrically reduced in thickness;

[0022] FIG. 3 shows a schematic diagram of a primary carbide reduced in thickness by a CVD process as well as rounding of edges and formation of a bead after carbide reduction with the CVD process;

[0023] FIGS. 4 and 5 show a schematic diagram of a hard material layer deposited by PVD, wherein the PVD layer has trough-shaped recesses and a micro-tooth arrangement for engagement with the base material, shown in FIG. 5, wherein the base material is in addition nitration-hardened; FIGS. 6 and 7 show a schematic diagram of a CVD layer on a primary carbide which has been reduced in thickness, wherein the layer has a micro-tooth arrangement for engagement with the base material, as shown in FIG. 7;

[0024] FIG. 8 shows a schematic diagram of an untreated cutting edge in the region of a primary carbide having cuts formed on both sides and detached on one side due to formation of a crack;

[0025] FIG. 9 shows a schematic diagram of a cutting edge coated by a PVD process;

[0026] FIG. 10 shows a schematic diagram of a cutting edge coated by a CVD process and a crack filled by the CVD process, respectively;

[0027] FIG. 11 shows a schematic diagram of a carbide relief;

[0028] FIG. 12 shows a schematic diagram of a bead smoothed by polishing;

[0029] FIG. 13 shows a schematic diagram of an optimally formed PVD layer in the region of a primary carbide; and

[0030] FIG. 14 shows a schematic diagram of an optimally formed three-layer CVD layer in the region of a primary carbide.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

[0031] In the CVD coating process, specifically selected gasses are provided in the same thermal-chemical process to chemically and/or thermally reduce the thickness of the primary carbides and/or dislodge the primary carbides to a predetermined depth immediately before the start of the actual coating. Typically, the predetermined depth is in the range between one micrometer to twice the layer thickness.

[0032] Alternatively, the primary carbides can be reduced in thickness or dislodged galvanically or chemically with a liquid medium in a separate process prior to the CVD deposition.

[0033] In a PVD process, the primary carbides are initially reduced in thickness or dislodged galvanically or chemically in a separate process using a liquid medium to a predetermined depth. This predetermined depth is preferably in the range of one micrometer to twice the layer thickness.

[0034] An surface of a tool before treatment is shown in FIG. 1. The primary carbides 3 and the secondary carbides 4 are embedded in the steel matrix tool. A crack 6 caused by machining is located next to the primary carbide, wherein the crack extends to the substrate surface 1. Additional cracks 7, which also extend to the substrate surface, are formed in the primary carbide as a result of machining. The machining direction is indicated by the reference numeral 5. The primary carbide can also protrude from the substrate surface. Such a carbide relief 20 is illustrated in FIG. 11.

[0035] According to an aspect of the method of the invention, the work surfaces which define the functionality of the tool, are first machined, i.e., cut, lapped or polished. Before the coating operation, the cut or uncovered primary carbides are removed to a predetermined depth or, alternatively, completely removed from the steel matrix near the marginal region. The carbide can be removed in a separate treatment prior to the coating or--as is possible only with the CVD process--during the coating process itself.

[0036] If the carbide is removed--as with the PVD process--prior to coating in a separate treatment with a liquid, for example in an alkaline electrolyte, then the composition of the electrolyte should be selected so that preferably only the primary carbides are dissolved or removed. The removal of the carbide and the intensity with which the carbide is removed, i.e., the speed and the depth of the removal, are controlled by the chemical composition and concentration of the electrolyte and the electrical current, the bath temperature and the immersion time. Shown in FIG. 2 is the region of an electrically reduced primary carbide. If the thickness of the carbide is reduced with a liquid, the treated work piece disadvantageously afterwards has to pass various cleaning and neutralizing baths, followed by intensive drying, which can cause the surfaces to be coated to rust or to become contaminated, adversely affecting the adhesion of the layers.

[0037] Layers deposited by the PVD process are illustrated in FIGS. 4 and 5. The deposited hard material layer 11 is disposed on the substrate surface and forms trough-shaped recesses 12. Is this a typical feature of the PVD process that the crack 6 is not or only insignificantly filled, i.e., the crack is not "cemented shut" and the adverse impact of the gap is still present and may even be enhanced. Also illustrated in FIG. 5 is a micro-tooth arrangement 22 which enhances the load bearing characteristic, and a nitration zone 23. FIG. 8 shows an uncoated cutting edge 16 with a primary carbide disposed at a disadvantageous position and a crack 6 caused by machining. The cutting edge 17 coated by PVD is illustrated in FIG. 9. The primary carbide is advantageously recessed by partial removal of material. As depicted in FIGS. 4 and 5, the gaps, however, are not filled or "cemented shut", thereby forming particularly critical defects.

[0038] By using CVD coating, however, removal of carbide can be directly integrated in the coating process as an "in situ" starting phase. In this case, substances which dissolve carbide are heated, rapidly flowing, highly reactive and etching process gases. The composition of these gases can be adjusted at will with a gas supply unit, and can thereby be adapted selectively and sequentially to the materials to be treated. Accordingly, the CVD process provides the following advantages:

[0039] (a) In contrast to the liquid phase, the gas phase can enter even the smallest cracks and the deepest openings, so that these openings and cracks can be completely decontaminated, depassivated and rounded, thereby significantly improving the layer adhesion.

[0040] (b) According to (1), the detached, splintered or dislodged carbides can be reduced in thickness in the gaseous reactive medium more rapidly due to the significantly increased contact surface area--in particular in these openings and cracks, thereby concentrating the defect reduction mainly in those areas that have the highest concentration of defects.

[0041] (c) With the adaptability of the composition of the process gasses used to dislodge the carbides, the walls and edges of the hollowed carbide clusters and crevices, respectively, can be alloyed with alloy components of the dislodged carbides and the steel matrix, whereby even small cracks can be sealed and sharp grooves, corners and edges can be filled and rounded. Advantageous preconditions for the subsequent coating and formation of layers in these recesses, similar to "sealing", are produced regarding the fracture mechanics.

[0042] (d) A transition phase (in situ) can be superimposed with the phase of removing carbides, either simultaneously or with a time offset. In the transition phase, reduction of the carbide and the

formation of the layer are carried out simultaneously or with a time offset, which may advantageously support the alloying, sealing or smoothing effect according to (c) and/or coat the steel matrix ahead of time.

[0043] FIG. 3 illustrates the advantages of removing the carbide using the CVD process. The edges 10 are also rounded in the region 9 of the removed primary carbide under formation of a bead.

[0044] The removal of carbide produces point-like recesses and/or recesses with a small area in the otherwise unchanged work surface, wherein the recessed depth of the carbides is selected depending on the layer thickness, the coating method, the carbide formation and the load bearing characteristics. The recessed depth should typically not be greater than about 30% to 200% of the layer thickness, wherein recesses of approximately 1 to 2 .mu.m represent the lower limit. These values can already adequately ameliorate the disadvantages of the relief formation according to (5) and (6), and provide the layer with additional support in the recesses.

[0045] A CVD layer after the removal of the carbide is shown in FIGS. 6 and 7. The CVD layer 13 is about twice to three times as thick as the PVD layer and forms troughs 14. A bead 15 is transferred to the layer surface. Also illustrated in FIG. 7 is the micro-tooth arrangement 22 between the layer and the base material.

[0046] In this way, CVD can be used to coat primary carbides which are unfavorably embedded, without causing them to break off. As seen in FIG. 10, a cutting edge 18 coated with CVD and a primary carbide embedded therein are advantageously rounded. Moreover, a previously existing crack 6 has expanded to from a rounded crack 19 and is completely filled with a CVD layer, thereby not only relieving, but completely "cementing in" the shrunken and recessed primary carbide.

[0047] Beads 15 which may appear, as illustrated in FIGS. 6 and 7, can be easily removed by diamond polishing. This is shown in FIG. 12 wherein a previously existing bead 15 has been smoothed and now forms a rounded edge 21.

[0048] Depending on the layer thickness, flat recesses in the layer surface may be perceived over the removed carbides. These recesses can advantageously be used as depositories for liquid or solid lubricants. These flat, trough-shaped recesses, as shown for example in FIGS. 4 to 7 and 12, significantly improve the slide friction characteristics, in particular under conditions of minimal quantity lubrication or insufficient lubrication. The depth of the carbide recesses is limited for the (PVD) layers which are only several micrometers thick, so that a complete removal of the primary carbides is not advisable and the defect potential can not be reduced within the theoretical limits. The depth of the lubricant depository can also not be adjusted optimally in this case.

[0049] (e) The CVD coating technique can also deposit continuous hard material layers in narrowly angled and deep cracks, thereby always providing completely coated and filled carbide nests, as illustrated in FIGS. 6, 7 and 10. In conjunction with the measures for suppressing the effect of notches described under (c) and (d), CVD therefore provides the best prerequisites for anchoring layers with a minimum tendency for mechanical fracture. A lubricant enclosed in the cavity and compressed periodically can therefore no longer cause a critical wedge action or cavitation, since openings and cracks do no longer exist, and also due to the formation of the hard material layer. The wedge action and cavitation would otherwise preferably attack below the layer, causing the layer to detach. The coating capability typical for CVI (chemical vapor infiltration) of the CVD coating technique provides enhanced protection against premature layer damage in particular in the fanned-out cavities of previously existing carbide accumulations.

[0050] (f) With the disposition characteristics typical for CVI of the CVD coating technique, coating material can be deposited in the smallest openings and cracks. According to (a) and (b), the openings and cracks not only sealed before coating, but also cemented shut with the coating material to support external loads. Torn, brittle or dislodged carbides are thereby etched along the formed openings and/or cracks and then firmly secured to and "cemented in" the steel matrix, as indicated in FIG. 10 with the reference number 19. This further reduces the effect of notches and wedges, thereby significantly reducing the aforedescribed defect potentials caused by the primary carbides.

[0051] (g) According to another aspect of the CVD coating technique, a thermal and/or chemical and/or thermal-chemical intermediate treatment can precede the actual layer disposition in the same process (in situ). The surface of the base material can be conditioned in a number of ways, for example, by deliberately micro-roughening the steel matrix in an additional process phase, which may be done after removing the carbide and before applying the coating. As illustrated in FIG. 7, micro-roughening facilitates the formation of a very fine micro-tooth arrangement 22 between the steel matrix and the layer at the beginning of the layer growth. Micro-roughening in conjunction

with the layer support in the region of the recessed primary carbides also increases the adhesion and resistance to alternating shear stress.

[0052] The particular characteristics of the CVD process described under (a) to (f) allow a strategic treatment of the base material and of other applied layers to reduce defects. For example, the composition and the manufacture of the steel and the carbide formation associated therewith (cast, forged or rolled) on the type of load (cutting, stamping, sheet metal forming or bulk forming tools) and on the tool material can be individually addressed. For example, based on the "sealing effect" according to (c), only a small amount of carbide would be removed if a sharp cutting edge is required. For an extreme load on an edge with a greater radius, however, more carbide would be removed, accompanied by a corresponding coating of the formed cracks, carbide nests or cavities. When "adhering" sheets are formed, for example sheets made of aluminum, a smaller recessed depth of the carbide may be preferred. The trough-shaped recesses can be filled with molybdenum sulfide (MoS.sub.2), with hexagonal boron nitride (hBN) or with a similar friction-reducing solid lubricant, which can be implemented as a final phase in the same CVD process.

[0053] With the tool of the invention which is coated by CVD, the primary carbides can be recessed in the marginal steel region in a predetermined amount by at least 1 .mu.m to approximately twice the layer thickness or can be completely removed. The single-layer or multi-layer CVD hard material layer together with components of the removed primary carbides completely fills these recesses or cavities, thereby providing point-wise distributed, form-fitting anchors for the layers in the base material to enhance the resistance of the hard material layer against alternating shear stress and improve the adhesion.

[0054] The primary carbides in the marginal steel region of the tool according to the invention made of tool steel and having a PVD layer system with a reduced number of defects, are recessed in a predetermined amount by at least 1 .mu.m to 4 .mu.m. The PVD hard material layer coats these recesses, thereby providing point-wise distributed form-fitting support for the layers in the base material. This arrangement enhances the resistance of the PVD hard material layer against alternating shear stress and improve the adhesion. This effect can be enhanced by nitration-hardening before PVD coating of the marginal steel region.

[0055] The PVD layer also includes a form-fitting micro-tooth arrangement between the layer and the steel matrix. In addition, the PVD layer has point-shaped or frough-shaped recesses disposed about the recessed carbides according to DIN4761-A1B, which form lubrication pockets.

[0056] The invention will be described with reference to the following examples.

EXAMPLES

Example 1

[0057] Carbide removal for a PVD coating.

[0058] For PVD coating, carbide can only be removed by a separate process. An electrolytic bath is used for removing primary carbides, for example carbides of the type M.sub.7C.sub.3,, wherein the electrolyte consist of an alkaline solution, such as 5% soda lye.

[0059] To increase the mechanical load-bearing capacity, the tool surface can be micro-roughened before or after removal of the carbide, but always before the PVD coating up to approximately 1/2 of the layer thickness by fine-grain blasting with Al.sub.2O.sub.3 or SiC. In addition, the marginal steel region can also be nitration-hardened to a depth of about 100 times the layer thickness using a plasma, before the PVD coating is applied.

[0060] An optimally formed tool surface with a PVD layer is schematically illustrated in FIG. 13.

Example 2

[0061] Carbide removal for a CVD coating.

[0062] With CVD coatings, carbide is removed in situ, i.e., in the same coating operation, in a temperature range of 800-1,000.degree. C. in an argon-hydrogen-HCl mixture. Time, temperature and gas composition determine the removal intensity and the removal depth, respectively, and the alloying, rounding, sealing and smoothing of the produced carbide nests. Advantageously, the gas mixture is introduced under reduced pressure and with a correspondingly high gas velocity. Depending on the chlorine fraction, alloying and rounding or smoothing of the carbide nests can be more or less profound. As a result of the alloying of the walls of the carbide nest with the removed

primary carbide components, recesses, rounded and coated areas, respectively, are formed in the marginal regions which, however, may extend to the substrate surface forming a slight bead.

[0063] At the same time carbide is removed, a suitable donor medium, such as titanium tetra chloride, may already be added to alloy the coating of the carbide nests with titanium. In this way, the carbide nests are coated faster and a layer growth out of these recesses more quickly. Simultaneously, a first hard material layer containing titanium is formed on the steel matrix surfaces. If a different gas mixture, which does not specifically react with carbide but does react with the steel matrix, is introduced into the reactor subsequent to the removal of carbide, then the steel matrix can be slightly etched at certain points, with an etching depth of approximately 3 to 5 .mu.m.

[0064] If the actual coating process is started immediately thereafter, then the CVD layer is disposed conformal with the conditioned substrate surface, thereby forming initially a substantially identical layer surface having the same layer topography, which is displaced by the layer thickness. In this way, a very fine micro-tooth arrangement between the layer and the base material can also be formed. At a later time, i.e. with increasing layer thickness and using different gas compositions and different donor materials, the layer topography can be smoothed by applying a multi-layer technique, whereby depending on the roughness requirement, the depth of the micro lubrication pockets can be adjusted to a greater or lesser depth.

[0065] Any beads around the micro lubrication pockets, which are determined by the size of the primary carbides and the depth of the removed primary carbide material, are removed by diamond polishing to adjust the roughness to a predetermined roughness. An optimally formed tool surface, for example having a three-layer TiC--TiN--TiCN--CVD layer, is schematically illustrated in FIG. 14.

[0066] While the invention has been disclosed in connection with the preferred embodiments shown and described in detail, various modifications and improvements thereon will become readily apparent to those skilled in the art. Accordingly, the spirit and scope of the present invention is to be limited only by the following claims.

The World's Leading Supplier of Stainless Steel 3X Faster, 2X Smoother 3X Tool Life, and Very Band Saw Blades & Bindery Supplies Paper Blades. Free Quote. Precision Drills, Drill Blocks & Sprays

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Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE NEWARK, N.J. 07105 (201) 344-1800 Fax: (201) 344-2951

September 8, 1995

CERTIFIED RECEIPT Z 258 627 068 orig. Z 258 627 069 copy

central file

ROBERT LOAVENPORT EXECUTIVE DIRECTOR

> PETER G. SHERIDAN CHEF COUNCIL

> > LOUIS LANZILLO

Mary Jo Aiello
Pretreatment & Residuals
401 East State Street
Floor 4 East
CN-029
Trenton, New Jersey 08625-0029

RE: PRETREATMENT PROGRAM ANNUAL REPORT NUMBER 12

Dear Ms. Aiello:

DANIEL F. BECHT, ESO

RAYMOND LUCHKO VICE CHAIRMAN

DONALD TUCKER COMMISSIONERS

DOMINIC W. CUCCINELLO RONALD W. GIACONIA JAMES KRONE FRANK ORECHIO

Enclosed are two copies of the twelfth annual report submitted by Passaic Valley Sewerage Commissioners to your agency. This report covers the one year period from August 1, 1994 through July 31, 1995. As in the past, we will be available to meet with your staff to answer questions or discuss continued efforts to improve our pretreatment program.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Divisit

Robert J. Davemport

Executive Director

RJD/sml

cc: Frank P. D'Ascensio

Patrick Durack, USEPA

LPRSA0008133

ABC 150655

Ideal Plating & Polishing
Reichhold Chemicals (another civil action)
Sun Chemical Corporation (another civil action)

ii 8 Categorical Companies - Local Limit Violations

Best Plating & Polishing
Coral Dyeing & Finishing
Fairfield Textiles Corporation
General Color Corporation
Kikuchi Color Chemical Corporation
Magruder Color Company
Power Conversion

TRB Electroplating

iii 8 Non - Categorical Companies - Local Limit Violations

Chem-Wash
Domestic Linen
Engelhard Corporation
New Jersey Transit
Passaic Valley Water Commission
Qualex, Inc.
Sandvik Coromat Co.
W. H. Linen Supply

iv 2 Non - Categorical Companies - Reporting Violations

Kuehne Chemical Company Liberty Optical

v 0 Categorical Companies - Reporting Violations

c) Companies subjected to enforcement action that are now in compliance:

i 33 Categorical Companies - Categorical Violations

Alliance Chemical
Cardolite Corporation
Chemical Corporation
Crompton & Knowles - Newark
Crompton & Knowles - Nutley
DaiColor - Pope
Dye Specialties
Fabricolor Manufacturing
Fairmount Chemical
Falstrom Company

- iv 2 Non Categorical Companies Reporting Violations
 - Kuehne Chemical Company Liberty Optical Mfg. Corp.
- v 0_ Categorical Companies Reporting Violations
- (d) As of 7/31/95, the following users were still not in compliance:
- i <u>8</u> Categorical Companies Categorical Violations

Chemical Compounds
Cookson Pigments
E. C. Electroplating
Elan Chemical
Givaudan Roure Corp.
Ideal Plating & Polishing Company
N. J. Galvanizing
Sun Chemical (this year's civil action)

ii 4 Categorical Companies - Local Limit Violations

Best Plating & Polishing General Color Company Power Conversion, Inc. TRB Electroplating

iii _7 Non - Categorical Companies - Local Limit Violations

Domestic Linen Supply Company Engelhard Corporation

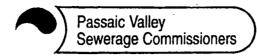
Nabisco New Jersey Transit Qualex, Inc. Sandvik Coromat Company W. H. Linen Supply

- iv 0_ Non Categorical Companies Reporting Violations
- v 0 Categorical Companies Reporting Violations

DANIEL F. BECHT, ESQ. CHAIRMAN

FRANK ORECHIO.

THOMAS J. CIFELLI
DOMINIC W. CUCCINELLO
ROMALD W. GIACONIA
JAMES KROME
RAYMOND LUCHKO
DONALD TUCKER.
COMMISSIONERS



600 WILSON AVENUE NEWARK, N.J. 07105 (201) 344-1800 Fax: (201) 344-2951 Control Tale

ROBERT J DAVENPORT

EXECUTIVE DRECTOR

PETER G. SHERIDAN CHIEF COUNSEL

> LOUIS LANZILLO CLERK

September 10, 1996

Mary Jo Aiello
Pretreatment & Residuals
401 East State Street
Floor 4 East
CN-029
Trenton, New Jersey 08625-0029

HAND DELIVERED

RE: PRETREATMENT PROGRAM ANNUAL REPORT NUMBER 13

Dear Ms. Aiello:

Enclosed are two copies of the thirteenth annual report submitted by Passaic Valley Sewerage Commissioners to your agency. This report covers the one year period from August 1, 1995 through July 31, 1996. As in the past, we will be available to meet with your staff to answer questions or discuss continued efforts to improve our pretreatment program.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Robert J. Davenport

Executive Director

RECEIVED

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NJOEPE
Div of Weter Quality
Bureau of
Pretroatment & Reciduals

RJD/sml

cc:

Frank P. D'Ascensio Patrick Durack, USEPA

VII COMPLIANCE/ENFORCEMENT ACTIVITIES - SEE FORMS AR-7, AR-8, and AR-9

The status of the enforcement activities is as follows:

- (a) As of July 31, 1995, the following enforcement actions were reported:
- i <u>4</u> Categorical Companies Categorical Violations

E. C. Electroplating
Ideal Plating & Polishing
Reichhold Chemicals
Sun Chemical Corporation

ii 8 Categorical Companies - Local Limit Violations

Best Plating & Polishing
Coral Dyeing & Finishing
Fairfield Textiles Corporation
General Color Corporation
Kikuchi Color Chemical Corporation
Magruder Color Company
Power Conversion
TRB Electroplating

iii 8 Non - Categorical Companies - Local Limit Violations

Chem-Wash
Domestic Linen
Engelhard Corporation
New Jersey Transit
Passaic Valley Water Commission
Qualex, Inc.
Sandvik Coromat Co.
W. H. Linen Supply

v <u>4</u> Categorical Companies - Reporting Violations

All Metal Polishing Emerson X-Ray Solutions Poughkeepsie Finishing Mrs. Weinberg's Kosher Foods

(c) Companies subjected to enforcement action that are now in compliance:

i <u>4</u> Categorical Companies - Categorical Violations

E. C. Electroplating
Ideal Plating & Polishing
Reichhold Chemicals
Sun Chemical Corporation

ii 8 Categorical Companies - Local Limit Violations

Best Plating & Polishing
Fairfield Textiles Corporation
General Color Corporation
Interstate Dyeing & Finishing
Kikuchi Color Chemical Corporation
Magruder Color Company
Polaris Plating
TRB Electroplating

iii 9 Non - Categorical Companies - Local Limit Violations

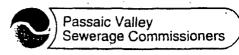
Chem-Wash
Domestic Linen
Engelhard Corporation
New Jersey Transit
Passaic Valley Water Commission
Qualex, Inc.
Rug Renovating
Sandvik Coromat Co.
W. H. Linen Supply

Compliance Schedule Summary

Form AR-9

| Facility Name | Reason for Compliance S | Date Compi Schedule Issued | Projected Comp. Date | Data Final Comp. Achieved |
|----------------------|-------------------------|-------------------------------|-------------------------|------------------------------|
| Best Plating | pН | 9/29/95 | 9/29/95 | 9/29/95 |
| Chemical Compounds | 414 | 12/2/94 | 1/1/96 | 1 |
| Cookson Pigments | 415, pH, BPJ | 10/17 <i>i</i> 94 | 12/31/95 | |
| Domestic Linen | PHC | 7/12/95 | 9/1/95 | 9/1/95 |
| E. C. Electroplating | 413 | 7/27/95 | 4/30/96 | 4/30/96 |
| Elan Chemical | 414 | 3/10/95 | 10/15/95 | 10/15/95 |
| Englehard | рН ` | 9/20/95 | 3/31/96 | 3/31/96 |
| Givaudan - Roure | 414 | 6/17/94 | 6/30/97 (revised) | •••••••••• |
| Interstated Dyeing | рН | 12/1/95 | 3/15/96 | 3/15/96 |
| Magruder Color | BPJ Cu Limit | 12/19/94 | 9/15/95 | 9/15/95 |
| Nabisco Foods | ρΗ | · 11/9/94 | 8/1/96 (revised) | |
| Polaris Plating | Hq | 10/31/95 | 4/15/96 | 4/15/96 |
| Power Conversions | рН | 6/18/96 | 9/1/96 | |
| Qualex | рН | 5/31/95 | 3/1/96 | 3/1/96 |
| Reichhold Chemical | 414 | 8/14/95 | 7/15/95 | 7/15/95 |
| Sandvik Coromat | ρН | 8/22/95 | 10/15/95 | 10/15/95 |
| Signature Cloth | рН | 5/24/96 | 4/30/96 | |
| Sun Chemical | 414 | 7/10/95 | 9/15/95 | 3/31/96 |
| TRB Electro | ρН | 12/12/95 | 3/15/96 | 3/15/96 |
| Universal Flavors | pH | 2/7/96 | 7/31/96 | |

1996



ROBERT J. DAVENPORT

XECUTIVE DIRECTOR

PETER G. SHERIDAN CHIEF COUNSEL

> LOUIS LANZILLO CLERK

IRENE G. ALMEIDA CHAIRMAN

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DANIEL F. BECHT, ESQ. FRANK J. CALANDRIELLO DOMINIC W. CUCCINELLO PETER A. MURPHY ANGELINA M. PASERCHIA THOMAS J. POWELL DONALD TUCKER COMMISSIONERS

600 WILSON AVENUE NEWARK, N.J. 07105 (973) 344-1800 Fax: (973) 344-2951 www.pvsc.com

September 9, 1998

Mary Jo Aiello Pretreatment & Residuals 401 East State Street Floor 4 East CN-029 Trenton, New Jersey 08625-0029 Federal Express 8491127234

RE: PRETREATMENT PROGRAM ANNUAL REPORT NUMBER 15

Dear Ms. Aiello:

Enclosed are two copies of the fifthteen annual report submitted by Passaic Valley Sewerage Commissioners to your agency. This report covers the one year period from August 1, 1997 through July 31, 1998. As in the past, we will be available to meet with your staff to answer questions or discuss continued efforts to improve our pretreatment program.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Robert J. Davenport

Executive Director

RJD/sml

Frank P. D'Ascensio cc:

Patrick Durack, USEPA

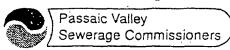
Companies that paid fines in the period 8/1/97 to 7/31/98 (cont'd)

- 73 PAN GRAPHICS, INC.
- 74 PAUL DYEING CO.
- 75 PNC 2, INC.
- 76 POLARIS PLATING, INC.
- 77 PORT AUTHORITY # 13406682 (PATH CAR MAIN.)
- 78 POWER BATTERY CO.
- 79 PRECISION CUSTOM COATINGS, INC
- 80 PRECISION PROTOTYPES, INC
- 81 QUALA SYSTEM, INC.
- 82 QUALA SYSTEMS, INC.
- 83 RECYCLED PAPER BOARD INC.
- **84 REICHHOLD CHEMICAL**
- 85 RENNIE MFG. & METAL FIN., CORP.
- 86 REX WINE VINEGAR CO.
- 87 RHE, INC.
- 88 ROCK-TENN CO.
- 89 ROSE COLOR
- 90 RUG RENOVATING CO. INC.
- 91 SAINT FRANCIS HOSPITAL
- 92 SANDVICK
- 93 SCALES AIR COMPRESSOR CORP.
- 94 SCHIFFENHAUS PACKAGING, CORP.
- 95 SHAMROCK TECHNOLOGIES
- 96 SHERATON HOTEL, COLUMBIA SUSSEX
- 97 SHERWIN-WILLIAMS, CO.
- 98 SIGNATURE CLOTH CO., INC.
- 99 SMITH-KLINE BEECHAM
- 100 STANSON CORP.
- 101 SUPERIOR DYEING CORP.
- 102 TEVA PHARMACEUTICAL
- 103 THE OKONITE COMPANY
- 104 THORN INCORPORATED
- 105 TROY CHEMICAL CORPORATION, INC.
- 106 UNITED VEIL DYEING
- 107 YANKEE LINEN
- 108 ZENITH DYEING & FINISHING, CO.

DONALD TUCKER CHARMAN

CARL S. CZAPLICKI, JR. VICE CHAIRMAN

ANTHONY W. ARDIS FRANK J. CALANDRIELLO ALAN C. LEVINE ANGELINA M. PASERCHIA KENNETH R. PENGITORE THOMAS J. POWELL COMMISSIONERS



100th Anniversary 1902 - 2002

600 WILSON AVENUE NEWARK, NJ 07105 (973) 344-1800 Fax: (973) 344-2951 www.pvsc.com NOBERT J. DAVENPORT #21
EXECUTIVE DIRECTOR

JAMES KRONE DEPUTY EXECUTIVE DIRECTOR

JOSEPH FERRIERO CHIEF COUNSEL

LOUIS LANZILLO CLERK

Executive Director Fax: (973) 817-5738

August 29, 2003

Mary Jo Aiello
Pretreatment & Residuals
401 East State Street
Floor 4 East
CN-029
Trenton, New Jersey 08625-0029

RE: PRETREATMENT PROGRAM ANNUAL REPORT NUMBER 20

Dear Ms. Aiello:

Enclosed are two copies of the twentieth annual report submitted by Passaic Valley Sewerage Commissioners to your agency. This report covers the one-year period from August 1, 2002 through July 31, 2003. As in the past, we will be available to meet with your staff to answer questions or discuss continued efforts to improve our pretreatment program.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

Robert J. Davenport Executive Director

RJD/np

c: Andy Caltagirone Virginia Wong, USEPA RECEIVED

O//SEP - 3 2003

NJDEP DIVISION OF WATER QUALITY IREAU OF PRETREATMENT & RESKOUGH & Nec 3/3/03

Companies that paid fines in the period 8/1/02 to 7/31/03

| | | | · • |
|-----|-------------------------------------|-------------|-------------------------------------|
| 1 | A&F ELECTROPLATING | 41 | MECHANICAL PLATING CO., INC. |
| 2 | ALL METAL POLISHING | 42 | METAL PARTS PROCESSING CO., INC. |
| 3 | ALPHAMETALS | 43 | NJ TRANSIT |
| 4 | AMERICAN METALS RECOVERY, CORI | 44 | NPC DISPLAY GROUP (EXPRESS DISPLAY) |
| 5 | AMERICAN WEAR, INC | 45 | O.J. FOOD GRADE TANK TRUCK WASH |
| . 6 | AMROD | 46 | OMG FIDELITY |
| 7 | ANDARN ELECTRO SERVICES, INC. | 47 | P. FERNICOLOR, INC. |
| 8 | ARAMARK UNIFORM SERVICE | 48 | PASSAIC ENGRAVING CO., INC. |
| 9 | ASHLAND CHEMICAL, INC. | 49 | PASSAIC VALLEY WATER COMMISSION |
| 10 | ATLAS REFINERY, INC | 50 | PAUL DYEING CO. |
| -11 | B LINE TRUCKING | 51 | PECHTER'S BAKING GROUP, LLC. |
| 12 | BAYONNE MEDICAL CENTER HOSPITA | 52 | PNC, INC |
| 13 | BELL CONTAINER | 53 | PORT AUTHORITY (PATH CAR MAIN.) |
| 14 | BETH ISRAEL HOSPITAL | 54 | PORTUGUESE BAKING COMPANY, LP. |
| 15 | CAMBREX (CASCHEM) | 55 | POWER BATTERY CO. |
| 16 | DEELEET MERCHANDISING CORP. | 56 | QUALITY DISTRIBUTION |
| 17 | DOMESTIC LINEN SUPPLY CO., INC. | 57 . | REX WINE VINEGAR COMPANY |
| 18 | ELAN CHEMICAL | 58 | RJB METAL FINISHING, CO. |
| 19 | ELEMENTIS SPECIALTIES, INC. | 59 | ROCHE MOLECULAR SYSTEMS, INC. |
| 20 | ENVIRONMENTAL MANAGEMENT, IN(| 60 | ROSE COLOR |
| 21 | EPOLIN, INC. | 61 | S.E. DESIGN, INC. |
| 22 | EXCLUSIVE FUR DYERS & DRESSERS | 62 | SANDVIK COROMANT CO. |
| 23 | F & T MEATS, INC. | 63 | SCHIFFENHAUS PACKAGING, CORP. |
| 24 | FAIRMOUNT CHEMICAL CO. | 64 | STIRRUP METAL PRODUCT CORP. |
| 25 | FALSTROM CO. | 65 · | SUN METAL FINISHING, INC. |
| 26 | FIRMENICH | 66 | SUNSHINE FRESH, INC. |
| 27 | FLEXO - CRAFT PRINTING CO., INC. | 67 | SWEPCO TUBE, LLC |
| 28 | FORM CUT INDUSTRIES, INC. | 68 | TEVA PHARMACEUTICALS USA, INC. |
| 29 | GALAXIE CHEMICAL CORP. | 69 | UNICORP |
| 30 | GRANDVIEW HOTEL LIMITED PARTNE | 70 | WASTE ENERGY TECHNOLOGY, LLC |
| 31 | GRANT INDUSTRIES | 71 | WEST HUDSON HOSPITAL |
| 32 | GREGORY PACKAGING, INC. | | |
| 33 | HART PRODUCTS CORPORATION | | |
| 34 | HARTZ MOUNTAIN CORP. | | |
| 35 | HOFFMAN- LA ROCHE, INC. | | |
| 36 | J.R. METAL (MECHANICAL PLATING, CO) | 1 | |
| 37 | LEA & PERRINS, INC. | | |
| 38 | MANNKRAFT CORRUGATED PACKAGING | 3 | |
| 39 | MARA POLISHING & PLATING CO. | | |
| 40 | MATERIAL PROCESSING TECH. | | |